# **REPORT**

# Technical description, maintenance exterior of Groot Hertoginnelaan 30, The Hague

Ambassy of the Republic of Croatia

Client: ambassy Croatia

Reference: BJ1462-RHD-XX-XX-RP-X-0001

Status: Draft/01

Date: 30 June 2023





Project related

### **HASKONINGDHV**

Contactweg 47
1014 AN Amsterdam
Netherlands
Industry & Buildings

+31 88 348 95 00 **T**info@rhdhv.com **E**royalhaskoningdhv.com **W** 

Document title:	Technical description, maintenance exterior of Groot Hertoginnelaan 30, The Hague
Subtitle	Ambassy of the Republic of Croatia
	BJ1462-RHD-XX-XX-RP-X-0001
Your reference	2011021111270170111170001
	Draft/01
	30 June 2023
Project name:	
Project number:	
-	Fréderique Sonnemans
Drafted by:	Fréderique Sonnemans
Checked by:	
Date:	
Approved by:	
Date:	
Classification	

Unless otherwise agreed with the Client, no part of this document may be reproduced or made public or used for any purpose other than that for which the document was produced. HaskoningDHV accepts no responsibility or liability whatsoever for this document other than towards the Client.

Please note: this document contains personal data of employees of HaskoningDHV. Before publication or any other way of disclosing, this report needs to be anonymized, unless anonymisation of this document is prohibited by legislation.



# **TECHNICAL DESCRIPTION**

In favor of: Maintenance of the EXTERIOR Groot Hertoginnelaan 30, The Hague

Specification number: BJ1462

Date: 30 June 2023

These specifications have been drawn up in accordance with the STABU system, with the online STABU2

Catalogue

under licence number: 88.20.04.E



Client: Embassy of the Republic of Croatia - The Hague

# General description of the work:

maintenance of the exterior, including repair of roof coverings

roof coverings and roof panelling, repair of window frames and paintwork, repair of pointing, installation of monument glass

Specification number:

Date:

Cadastral data parcel:

's Gravenhage, GVH09-N-3325

Consultant: Royal HaskoningDHV



### **TABLE OF CONTENTS**

### **ADMINISTRATIVE PROVISIONS**

00 GENERAL 00.01 GENERAL DESCRIPTION

### **01 CONDITIONS APPLICABLE TO THE WORK**

01.01 APPLICABLE CONDITIONS AND REGULATIONS

01.02 ADDITIONS TO AND DEVIATIONS FROM THE UAV 2012

01.03 INSURANCES

01.04 SETTLEMENT OF CHANGE IN COSTS AND PRICES

01.05 DRAWINGS AND CALCULATIONS

01.06 WORKING CONDITIONS

# **TECHNICAL PROVISIONS AND WORK INSTRUCTIONS**

### **05 CONSTRUCTION SITE FACILITIES**

05.00 GENERAL

05.31 SHEDS AND CHAINS

05.32 PROVISION OF EQUIPMENT

05.34 CLEANING AND PREVENTIVE MAINTENANCE

05.41 SITE LAYOUT

05.42 FENCING AND ADVERTISING

### 10 PROPPING AND DEMOLITION WORK

10.00 GENERAL

10.31 TOTAL DEMOLITION WORK

10.32 LOCAL DEMOLITION WORK

### **12 EARTHWORKS**

12.00 GENERAL

12.50 PROCESSING OF SOIL AND SOIL REPLACEMENT MATERIALS

# 14 EXTERNAL SEWERAGE AND DRAINAGE WORK

14.00 GENERAL

14.33 PLASTIC PIPEWORK

### **15 SITE PAVING**

15.21 DEMOLITION/REMOVAL OF EXISTING SITE PAVING

15.27 RE-LAYING EXISTING SITE PAVING

### 22 MASONRY

22.00 GENERAL

22.14 SAMPLES, TEST ASSEMBLIES AND TEST SURFACES

22.21 DISMANTLING/REMOVAL OF EXISTING MASONRY

22.22 CLEANING EXISTING MASONRY

22.25 REPAIRING EXISTING MASONRY

22.26 ADJUSTING EXISTING MASONRY



### 22.84 DAMP-PROOFING

### **24 ROUGH CARPENTRY**

24.00 GENERAL

24.26 ADJUSTING EXISTING ROUGH CARPENTRY

24.31 BEAM STRUCTURES

24.44 PROFILED STRIP COVERINGS

# 30 FRAMES, WINDOWS AND DOORS

30.00 GENERAL

30.25 REPAIRING EXISTING WINDOW FRAMES, WINDOWS AND DOORS

30.26 MODIFY EXISTING WINDOW FRAMES, WINDOWS AND DOORS

30.41 ROOF WINDOWS

30.43 ROOFLIGHTS AND SKYLIGHTS

**30.88 ADJUSTMENT COSTS** 

### **32 STAIRS AND RAILINGS**

32.25 REPAIRING EXISTING STAIRS AND RAILINGS

32.51 RAILINGS

# **33 ROOF COVERINGS**

33.00 GENERAL

33.26 ADJUSTING EXISTING ROOF COVERING

33.31 SUBSTRATE PREPARATION, COURSE ROOFING

33.32 INSULATION/SIDING

33.33 BITUMINOUS ROOFING MATERIALS

33.38 PARTS TO BE INCORPORATED, ORBITAL ROOFING

33.61 STANDING SEAM SYSTEMS

33.62 RIDGE COVERINGS

# **34 GLAZING**

34.00 GENERAL

34.25 REPAIR EXISTING GLAZING

34.26 ALTERATION OF EXISTING GLAZING

34.33 MULTI-LAYERED INSULATING GLASS

34.38 MONUMENTAL GLASS

### 35 NATURAL AND ARTIFICIAL STONE

35.00 GENERAL

35.22 CLEANING EXISTING NATURAL STONE

35.25 REPAIRING EXISTING NATURAL STONE

### **40 PLASTERING**

40.00 GENERAL

40.25 REPAIR OF EXISTING PLASTERWORK

### **43 METAL AND PLASTIC WORK**

43.00 GENERAL

43.25 REPAIRING EXISTING METAL AND PLASTIC WORK



# 43.26 ADJUSTMENT OF EXISTING METAL AND PLASTIC WORK

# **45 FINISHING CARPENTRY**

45.00 GENERAL 45.41 PANELLING

# **46 PAINTING**

46.00 GENERAL 46.21 EXISTING SUBSTRATE, WOOD 46.23 EXISTING SURFACES, STONY

# **50 GUTTERS AND RAINWATER DRAINS**

50.26 MODIFYING EXISTING GUTTERS AND RAINWATER DRAINS 50.41 METALLIC PIPES 50.42 PLASTIC PIPEWORK

# **70 ELECTRICAL INSTALLATIONS**

70.00 GENERAL
70.87 EARTHING AND LIGHTNING CONDUCTOR MATERIALS

30 June 2023 AMBASSY CROATIA BJ1462-RHD-XX-XX-RP-X-0001

5



# **ADMINISTRATIVE TERMS**

### **00 GENERAL**

00.01 GENERAL DESCRIPTION
00.01.01 GENERAL DESCRIPTION OF THE WORK

The work concerns maintenance to the exterior of the Croatian Embassy in The Hague.

General information of the property:

Address: Groot Hertoginnelaan 30, The Hague

Year built: 1895

Building style: Neo-Renaissance Monument: Municipal monument

**Description monument:** 

Left part of a capital, double villa whose construction was completed in 1895.

The complex is built in neo-Renaissance style and also shows, in the cantilever roof sections with decorative carvings and corbels, features of chalet architecture.

Built of brick with plastered bands and blocks, the double villa has gables with cantilevered corbels against the rising corner bay of no. 30 and on the side walls.

Gabels with cantilevered roofs with the above-mentioned decoration.

Against the central axis of the front facade is a polygonal wooden bay window.

No. 32 has a tower-shaped pavilion, which, above the cornice that runs around it, has another one storey with a three-piece window and crowned by a spire with dormers and cupola.

No. 30 has, in the roof over the bay window, a richly elaborated chalet-shaped dormer window.

In the left bay of No. 30 are arched, three-piece windows.

Most windows have chequered relief arches.

The door of no. 32 is in an extended porch.

The cornice is supported by small corbels and, at the tower-like pavilion, by consoles.

Building of general interest for the municipality of The Hague because of its architectural-historical value. It is a characteristic example of generously designed villa architecture, in which neo-Renaissance forms are combined with motifs from the chalet architecture that was developed in the last quarter of the 19th century under the influence of increasing tourism to countries such as Switzerland were common. The property is part of a series of grand villas on this part of the Groot Hertoginnelaan, which is in relation to the rest of Duinoord shows a different building pattern.

The works include maintenance of the exterior:

- Replacing slate roofing and surrounding lead connections
- Replacing zinc roofing and surrounding connections
- Improving roof lights and roof access
- Repairing chimneys
- Repairing woodwork in gutter and brackets
- Repairing and painting window frames
- Minor repairs to masonry, pointing and stonework
- Laying laminated insulating glass
- Reinstating the balcony on the high extension at the rear façade
- Complete demolition of the garage on the left side of the building,

a separate demolition permit will be submitted for this.



# **01 CONDITIONS APPLICABLE TO THE WORK**

### **01.01 APPLICABLE CONDITIONS AND REGULATIONS**

### 01.01.10 APPLICABLE CONDITIONS

### 01. APPLICABLE CONDITIONS

Applicable conditions are the STABU Standard Technical Provisions in the STABU-Standard 2019, as well as, insofar as they have not been expressly deviated from in the specifications, the Uniform Administrative Terms and Conditions for the Execution of Works and of Technical Installation Works 2012 (UAV 2012), as included in the STABU-Standard 2019 as Annex I, issued by the STABU Foundation in Ede.

# 02. COMMUNICATION

Communication between client and contractor shall be through:

The designated contact person at Royal HaskoningDHV.

03. PROJECT DESCRIPTION/ SPECIFICATIONS CONSISTING OF PARTS

The project description consists of the parts listed below:

- Part: Additional Administrative Provisions UAV 2012.
- Part: Additional Technical Provisions STABU<sup>2</sup>-System.
- Part: Work description STABU<sup>2</sup>-Systematics.

### 90. SUPPLEMENTARY PROVISIONS

Reference to standards from the Buildings Decree

The Building Decree 2018 refers to NEN standards. NEN standards applicable to this work form an integral part of these specifications.

# 91. PRESCRIBED SUBCONTRACTORS

THE FOLLOWING SUBCONTRACTOR(S) ARE PRESCRIBED:

- a. For work based on URL 4003, 'execution guideline Historic Masonry' a contractor company certified in accordance with BRL ERM 4000 in combination with URL 4003.
- b. For work based on URL 4006, 'execution guideline Historic pointing' a contractor company certified in accordance with BRL ERM 4000 in combination with URL 4006.
- c. For activities on the basis of URL 4010, 'implementation guideline Historic Lead Roofing' a contractor company certified in accordance with BRL ERM 4000 in combination with URL 4010.
- d. For work based on URL 4009, 'execution guideline Historic Painting' a contractor company certified in accordance with BRL ERM 4000 in combination with URL 4009.

# 01.02 ADDITIONS AND DEROGATIONS TO AND INTERPRETATIONS OF THE UAV 2012

# 01.02.01 DESIGNATIONS, DEFINITIONS

# 01. ADDITIONAL DEFINITIONS

Work site means the land and/or water and/or buildings or parts thereof designated as such, which the client makes available to the contractor for the realisation of the work.

Building site means the land, water or building on which, in which or under which the work is to be performed.

### 01.02.02 APPLICABLE REGULATIONS

### 02. APPLICABILITY PUBLICATIONS

The technical standard regulations referred to in Section 2(2) of the UAV 2012 are understood to mean the standards, guidelines and other publications declared applicable.



Where a technical standards regulation is mentioned without a date, it applies as it reads three months before "the day of the quotation".

# 09. JOINT AND SEVERAL LIABILITY

Where the building contract of which these specifications form part has been entered into with two or more contractors who have tendered or bid jointly, all those contractors remain jointly and severally liable for the performance of all obligations arising from this agreement.

### 90. STANDARDS AND GUIDELINES

Read instead of Section 2(2) of the UAV:

'All assessment guidelines (BRL) and the Dutch Standards (NEN), Dutch Practice Guidelines (NPR) and Dutch Prestandards (NVN), as well as the foreign standards and guidelines accepted as Dutch standards, insofar as they are listed on NEN Connect, managed by the Netherlands Normalisation Institute, as they read three months prior to the day of the tender, including the listed correction sheets and supplements to the aforementioned standards and guidelines shall apply as if they were included verbatim in the specifications.

Where standards, guidelines, publications, etc. are mentioned in an installation paragraph, these apply as additional information. What is stated in this paragraph remains fully applicable. In the event of discrepancies, the contractor must inform the management in writing, without being able to derive additional work from this.

The standards referred to in section 2, paragraph 2 of the UAV 2012 and provision 00.02.02-02 PUBLICATIONS can be obtained for a fee from the Netherlands Standardisation Institute in Delft via the NEN website: www.nen.nl or

e-mail: klantenservice@nen.nl

### 91. INCONSISTENCIES IN CONTRACT DOCUMENTS

In addition to the provisions of Section 2(4) of the UAV, which states among other things: "unless a different intention follows from the specifications", the various parts of the contract documents are first and foremost supposed to complement each other.

Where one of the provisions of these specifications or one or more of the provisions of regulations declared applicable in these specifications conflict with each other, priority shall exist in the following order (in descending order):

- 1. The building contract plus the associated supplementary orders and the environmental permit;
- 2. the regulations of the Municipal Services and Companies;
- 3. the notes of information;
- 4. these specifications (the description of the work);
- 5. the drawings and other annexes accompanying these specifications;
- 6. the UAV 2012;
- 7. the STABU Standard.

Furthermore, a supplement to and/or deviation from paragraph 2(4) of the UAV states that, if parts of the specifications contradict each other, but the contractor has not pointed this out to the management and/or the principal, while the contractor could have been aware of it in the phase prior to - or at the time of - entering into the building contract, the management will decide on the interpretation of the specifications, whereby the contradiction may be interpreted to the contractor's disadvantage, without the contractor being able to derive a claim for additional work or an increase in the contract price from this.

# 92. CONTRADICTIONS DURING EXECUTION

In the event of contradictions in the documents relating to the work, the following order of precedence - in descending order - shall be observed:

- 1. All rules and regulations issued by the government or (semi-)public institutions;
- 2. Applicable NEN standards and the requirements of the competent



Applicable NEN standards and the requirements of the competent inspection authorities; Provisions, regulations, ordinances, conditions and instructions by or on behalf of the government, utility companies and other public-law bodies;

- 3. Standard sheets, regulations, certificates, etc;
- 4. The processing instructions to be provided by the manufacturer/supplier upon delivery;
- 5. In approved minutes of decisions recorded in construction meetings;
- 6. Changes to specifications, such as approved in writing and assigned additional and less work;
- 7. Installation/work drawings approved on behalf of the management, insofar as they relate to installation components;
- 8. Architectural working and detail drawings approved on behalf of the management;
- 9. The note(s) of alterations and additions;
- 10. The written specifications and technical description and/or work description;
- 11. The drawings accompanying the specifications;
- 12. The Stabu Standard.

For drawings, the drawing with the largest scale applies in the first place. In the event of contradictions in and/or between the documents applicable to the execution of the work, the management will decide. If the architectural underlay, details and/or sections shown on the installation drawings deviate from the architectural drawings accompanying the specifications, the architectural drawings are decisive. The installations are indicated in principle and any differences between installation drawings and architectural drawings shall not be eligible for settlement.

### 93. ALTERNATIVES

Where manufacturers, brands or types are mentioned in the specifications, this is intended to indicate a technical, functional and aesthetic quality.

For all makes or types mentioned in the specifications, the tenderer/contractor may propose equivalent makes or types, unless it is expressly stated that a named make or type is prescribed.

If the tenderer/contractor wishes to include an equivalent make or type in his tender budget, it is the responsibility of the tenderer/contractor to demonstrate equivalence. If this equivalence is not sufficiently demonstrated by the tenderer/contractor, the tenderer/contractor must still use the make or type mentioned in the specifications.

in the specifications without the tenderer/contractor being entitled to claim an additional payment. Before the building materials in question may be ordered, the tenderer/contractor must submit the demonstration of equivalence to the management for approval by making a clear comparison in a single document per quality of both the make, brand or type mentioned in the specifications and the or type and the alternative proposed by the tenderer.

The assessment criteria are the maintenance of the same specification requirements with regard to functionality, construction, quality, appearance, dimensions, weight, expected service life, operating and/or consumption costs and profitability, insofar as relevant for the alternative in question.

The assessment of relevance and equivalence of the various quality aspects rests reasonably and fairly with the management.

If so desired, the tenderer/contractor must submit a statement from a demonstrably independent expert that demonstrates equivalence in the aforementioned aspects within two weeks (or another term to be communicated by the principal or the management) of the date of a written request to that effect from the principal or the management.

Furthermore, the contractor may only manufacture and/or order the materials to be supplied for this work after receiving permission from the management.

If the contractor intends to tender with another manufacturer, he must demonstrate equivalence on all aspects in accordance with the manner described above.



The contractor shall state any price consequences whereby no additional work is permitted, unless the management decides otherwise.

# 94. SUPPLEMENT TO SECTION 2(5) OF THE UAV

The warning referred to in Section 2(5) of the UAV must be given by the contractor before ordering and/or executing.

Subsequent warnings never give cause for additional payment.

### 95. STANDARDS

The installations described below in the specifications must comply with:

- all government regulations or regulations of lower public institutions;
- applicable NEN standards and the requirements of authorised inspection bodies.

### 01.02.03 MANAGEMENT

### 01. DESIGNATED MANAGEMENT

The management, as referred to in Section 3 (1) of the UAV 2012, is designated:

The party indicated on the promissory notes

### 01.02.04 CONTRACTOR'S AUTHORISED REPRESENTATIVE

### 90. PROXY

The designation by the contractor of persons who will represent him in matters concerning the work must be made using a power of attorney in accordance with Annex A of the UAV.

### 91. AUTHORISED REPRESENTATIVE(S)

The names of the authorised representatives to be appointed by the contractor shall be notified in writing to the management before the start of the work.

The management shall be entitled to demand the replacement of the authorised representative(s) if it has become apparent to it that the authorised representative lacks the necessary suitability for its task. 01.02.05 OBLIGATIONS OF THE PRINCIPAL

### 01. CONSTRUCTION MEETING

The construction meeting, as referred to in section 5 paragraph 1 of the UAV 2012, shall be held.

# 08. PRESENCE OF CONTAMINATION

The work site and/or the building site and/or the old building materials coming from the work and/or the building materials made available by the client is/are contaminated with the substances listed below and to the extent indicated.

- oil tank near the driveway, according to NEN5740 examination still to be carried out

### 90. DECISIONS AND DATA

To Section 5(1) of the UAV is added: However, if parts of the work have been developed or prepared by or on behalf of the contractor, the contractor shall arrange for the necessary permits, exemptions or similar decisions and also for the necessary detailed drawings and other data.

### 01.02.06 OBLIGATIONS OF THE CONTRACTOR

# 09. COORDINATING STRUCTURAL ENGINEER

The contractor shall be designated as being the coordinating structural engineer. This coordinating structural engineer shall be the same as the designing structural engineer.

### 19. LANGUAGE AND CORRESPONDENCE

Correspondence which is also directly addressed to the client must be in both English and Dutch.

Other correspondence, both oral and written, concerning the execution of the work should be in Dutch.

# OVERVIEW OF PRESCRIBED SUBCONTRACTOR(S)/SUPPLIER(S)

The following subcontractor(s) are prescribed:

a. For work based on URL 4003, 'execution guideline Historic masonry' a contractor company certified in accordance with BRL ERM 4000 in combination with URL 4003.



- b. For work based on URL 4006, 'execution guideline Historic pointing' a contractor company certified in accordance with BRL ERM 4000 in combination with URL 4006.
- c. For activities on the basis of URL 4010, 'implementation guideline Historic Lead Roofing' a contractor company certified in accordance with BRL ERM 4000 in combination with URL 4010.
- d. For work based on URL 4009, 'Historic Painting Implementation Guideline', a contractor company certified in accordance with BRL ERM 4000 in combination with URL 4009.

### 29. CONFLICTS OF INTEREST, BRIBERY AND CONTACTS

The contractor shall not offer or promise to the principal, its staff or representatives, nor to third parties, for themselves or any other party, any gift, reward, compensation or benefit of any kind that could be interpreted as an illegal practice.

It is furthermore prohibited to make use in any way of the services of employees of the principal in or in connection with work that is or may be carried out directly or indirectly.

If it appears that the contractor has acted contrary to the aforementioned, the client may dissolve the agreement in full or in part with immediate effect without notice of default and without being liable for any compensation.

### 31. CONTRACTOR'S ADJACENCIES REPORT

Before commencing the execution of the work, the contractor shall provide the management with a report drawn up by a real estate agent, appraiser or surveyor on the condition of the abovementioned encroachments.

Adjoining properties:

a: Site fixtures

b: Trees

c: Pavements

D. Fences

### 32. UNDERGROUND CABLES AND PIPELINES

Before starting work, the contractor will investigate the exact location of networks at the excavation site and ensure that the area information received from the Land Registry and Public Registers Service is present at the excavation site in accordance with the WIBON.

The contractor shall ensure that during the execution of the (excavation) work no damage occurs to the networks located in the excavation site.

The contractor will ensure that the information received about the cables and pipelines present in the ground is present at the excavation site and will instruct executive and machine operating personnel.

The contractor will carry out the (excavation) work in accordance with the CROW publication (Preventing damage to cables and pipelines).

### Trial trenches:

- If trial trenches are to be dug, these will be described in the work description stating number or cumulative length thereof and the method of digging.

Object Specific Cables, Pipes and Components:

- In case damage is found or caused by the contractor then repair of damage to cables and components of the security system shall be carried out by the security system supplier.
- 33. COMPLIANCE WITH ALIENS EMPLOYMENT ACT

With reference to Section 6(11) of the UAV 2012, the contractor is deemed to be familiar with the provisions of the Foreign Nationals (Employment) Act concerning the prohibition of employing foreign nationals in the Netherlands without a work permit.

The contractor complies with the provisions of the Way as well as this specification.

At each construction meeting, the contractor shall ensure that "compliance with the Wav" is placed on the agenda, discussed and recorded in the report.



The contractor shall point out in writing the provisions of the Wav to every subcontractor contracted by him in the execution of the work and shall oblige the subcontractor to comply with the provisions of the Wav and to include this specification provision in (subcontracting) agreements to be concluded by him. All consequences and costs associated with (non-)compliance shall be borne by the contractor.

The contractor must establish the identity of all foreign nationals present at the work, as referred to in Section 15 of the Wav, and check the identity documents and work permits of these foreign nationals for authenticity and validity.

The contractor shall keep copies of these documents in his administration as referred to in Section 15 of the Wav, also on behalf of the principal, until at least 5 (five) years after the end of the calendar year in which delivery takes place.

The contractor may use electronic means for this purpose.

The principal, or the person designated by him, may at any time check the contractor's compliance with the Wav and this specification provision.

At the first request of the client, or the person designated by him, the contractor shall immediately submit the relevant records and (stored) documents.

In the event of any violation of the Wav whatsoever, established by the Inspectorate SZW or any other body, any penalties arising therefrom for the principal shall be borne by the contractor and the contractor shall indemnify the principal in this respect.

The principal shall pass on these fines to the contractor and the contractor shall reimburse the principal on demand, or the principal shall set off these fines against the next (instalment) payment(s) to be made by the principal to the contractor, without any notice of default being required and regardless of any objection or appeal by the contractor against the fine imposed.

The foregoing shall not affect all other rights and claims of the Client.

### ACCIDENTS

The contractor must immediately inform the management of all accidents on the construction and/or work site, providing all relevant information.

### 35. HEALTH & SAFETY MANAGEMENT SYSTEM

In support of the H&S coordinator(s), the contractor must implement a demonstrably active policy in the area of health and safety. The contractor must demonstrate the active policy by means of an:

- SCC certificate.

# 36. WORK OUTSIDE AGREED WORKING HOURS

If the parties have agreed on working hours and the contractor intends to have work done outside these agreed working hours, he shall inform the contractor of his intention in good time by email:

he shall notify the management of this intention in good time by email.

### 37. NOISE LEVEL RESTRICTIONS

The following restrictions apply with regard to the noise level:

The noise level resulting from the work, measured at the facade, shall not exceed 60 db(A).

### 39. PRECARIO

The cost of precario shall be borne by the contractor.

# 41. INDEMNIFICATION

The contractor shall indemnify the principal against any claims made by the tax authorities within the framework of the Vicarious Tax Liability Scheme, as well as against any recourse claims based thereon by subcontractors who will be charged with (part of) the work.

The contractor must include this specification provision in any (subcontracting) agreements to be entered into by him and oblige the subcontractor to include this provision in any (subcontracting) agreements to be entered into by him.

### 42. CONTRACTOR'S PAYMENT HISTORY

If requested, the contractor must provide the principal with the most recent statement from the tax authorities after the end of each calendar quarter regarding its payment behaviour as regards the



payment of wage tax and social insurance contributions. The contractor must include this specification provision in any (subcontracting) agreements to be entered into by him and oblige the subcontractor to include this provision in any (subcontracting) agreements to be entered into by him.

### 79. COMPLIANCE WITH REGULATIONS ON LAND AND BUILDINGS

During execution of the work, the regulations applicable to the site and buildings must be strictly observed and followed.

These regulations may be evidenced by, among other things, prohibitive and/or mandatory signs on the site or in or on the buildings, or by further regulations made known on request.

The consequences of and the costs associated with compliance with the aforementioned regulations shall be borne by the contractor.

- 90. WET AANPAK SCHIJNCONSTRUCTIES (WAS)
- a. With reference to section 6, paragraph 11 of the UAV 2012, the contractor will comply with the applicable laws and regulations in the field of employment conditions and the collective labour agreement applicable to him during the performance of the work.
- b. The contractor will record all employment conditions agreements for the execution of the work in a transparent and accessible manner.
- c. Upon request and without delay, the contractor shall provide competent authorities with access to these employment conditions agreements and cooperate in inspections, audits and/or wage validation.
- d. On request, the contractor will immediately provide the principal or the person designated by the principal with access to the employment conditions referred to under c. if the principal deems this necessary in connection with the prevention or handling of a wage claim regarding work performed for the execution of the work.
- e. The contractor is obliged to include this specification provision in any (subcontracting) agreements he may enter into and to oblige the subcontractor and/or other parties to include this provision in any (subcontracting) agreements they may enter into.

### 91. OTHER EXECUTION METHODS

No rights to charge for additional work can be derived from other construction and/or execution methods proposed by the contractor with the resulting adjustment of other works and activities, the decision on which rests with the principal/management.

Third-party extra work resulting from this shall also be charged to the contractor who initiated the proposal for a different construction and/or execution method.

Approval by the principal shall not affect the contractor's responsibility for the soundness of the changes referred to here.

# 92. DEVIATIONS FROM AND ADDITIONS TO SECTION 6 UAV

As a supplement to Article 6.2 of the UAV and, as far as necessary, as a departure from Article 2.4b of the UAV, if parts of the work are not explicitly described in the specifications, but may reasonably be considered part of the work according to the drawings, usage or in some other way, or are necessary in order to deliver the work in a complete state, it is part of the contractor's obligation to carry out these activities and/or deliveries, without being able to charge any sum for them.

Contrary to paragraph 6.3, ordering building materials is only permitted in consultation with and after permission from the management.

Breakdowns and consequences thereof in respect of the facilities referred to in paragraph 3, of whatever nature and due to whatever cause, shall not entitle the contractor to compensation or to an extension of the contracted construction period.



In addition to paragraph 6.9, the contractor shall indemnify the principal against all claims arising from the use or application of materials, constructions or systems to which he is not entitled by virtue of patent rights or copyrights granted to others or other intellectual property rights.

The information, measurements and numbers given in the specifications and accompanying documents for the purpose of the working drawings, calculations and the like to be produced by him must be checked by the contractor 4 weeks before production and installation of the parts concerned.

If the contractor is in default, all financial consequences will be borne by the contractor.

The contractor must contact the municipality, fire brigade and utility companies after the specification phase itself and prior to execution in order to obtain final approval of the working drawings he has produced and inform the client in writing regarding the approval(s).

### Supplement Section 6(10) of the UAV with:

The contractor shall ensure the coordination with regard to the work of all utilities involved and the municipality (gas, water,

electricity, heat, cold, sewerage, telephony, data, cai and the like). The contractor should monitor the implementation schedule and notify the utilities and the municipality when which works are to take place.

The contractor must coordinate the work and consult with the utility companies, the municipality and the client. The application for connection to the pipeline network of the gas, water, heat or electricity supply company shall be submitted to these companies/authorities by the contractor in good time. The connection costs will not be borne by the contractor with the exception of those items/parts explicitly mentioned in the specifications as forming part of the contractor's offer in these specifications. The application to the municipality for approval of the drawings concerning the technical fire safety provisions must be provided by the contractor.

Adjustments to these provisions resulting from structural changes must be submitted to the municipality in good time.

The application for connection to the public telephone network for the forwarding of the security systems and lifts will be submitted by the contractor.

submitted. This in consultation with the client.

The connection costs will not be borne by the contractor, with the exception of those items/parts explicitly mentioned in these specifications as forming part of the contractor's offer for these specifications.

Section 6 of the UAV, supplement with paragraph 31:

The contractor shall indemnify the principal by assuming all harmful consequences of the contractor's failure to comply with laws or generally binding regulations.

Section 6 of the UAV, supplement with paragraph 32:

If the contractor wishes to continue working in less favourable weather conditions, he will make the necessary preparations and measures in consultation with the management. The resulting costs shall be borne by the contractor.

Section 6 of the UAV, supplement with paragraph 33 - Subcontracting

If the contractor believes that a prescribed subcontractor will not perform, will not perform on time or will not perform properly, and the contractor would act contrary to good faith by engaging this



subcontractor, without pointing this out to the management, the contractor is liable for the harmful consequences of his omission.

Section 6 of the UAV, add paragraph 34:

The contractor must have a health and safety policy plan (including a project safety plan) in which agreements have also been made regarding compliance.

The responsibility for (the supervision of) compliance with the working conditions-related statutory regulations or orders relating to the execution of the work rests entirely with the contractor. The contractor shall indemnify the principal against all third-party claims arising from failure to comply or to comply adequately with the government obligations on working conditions relating to the execution of the work.

# 93. PRESCRIBED BUILDING MATERIALS / SUPPLIERS / SUBCONTRACTORS

Notwithstanding Section 5(4) and Section 6(27) of the UAV, the contractor is liable for:

- a. the non-delivery or late delivery of building materials to be procured from a prescribed supplier;
- b. the non-delivery or late delivery of prescribed building materials, for which there is no choice as to the supplier(s) of these building materials;
- c. failure of a prescribed subcontractor to perform or to perform on time or properly;
- d. the financial condition of prescribed suppliers and/or subcontractors.

If the contractor believes he cannot accept the above liability

accept the aforementioned liability in one or more of the cases mentioned, he will warn the management in writing at the time of the

tion in writing, after which a solution must be found in mutual consultation and with the approval of the principal, a solution must be found.

### 94. TIME OF PROVISION OF DATA

The contractor is obliged, within 10 working days of the signing of the

The contractor is obliged to provide a schedule within 10 working days of signing the building contract, indicating the dates by which he must have the information required for the (start of the) execution, in accordance with UAV section 5, paragraph 1, at the latest; all this on the basis of the general schedule and in consultation with the management.

# 01.02.07 DATE OF COMMENCEMENT

# 01. DATE OF COMMENCEMENT

In explicit deviation from Section 7 (1) of the UAV 2012, the date of commencement shall be considered to be:

The date of commencement of the work will be laid down in the general schedule.

# 02. COMMENCEMENT OF WORK

The contractor is not permitted to commence the work before the date of commencement.

01.02.08 DURATION OF EXECUTION, POSTPONEMENT OF COMPLETION, TESTING

# 01. DELIVERY PERIOD

The period within which the work must be delivered is in:

- in calendar months: 4

# 03. DATE OF COMPLETION

The work must be delivered no later than:

Assuming an expected start date: as stipulated in the building contract

### REQUEST FOR INSPECTION

In Section 9(1) of the UAV 2012, the phrase "The management may be satisfied with an oral announcement, which is recorded in the diary or weekly report referred to in Section 27" is deleted.

A new paragraph shall be added to Section 9(1) of the UAV 2012 as follows:



"1a. A request by the contractor for inspection will only be able to be considered if the request has been delivered to the management at least ten days, before the day on which the work or a part thereof will, in his opinion, be completed."

### 90. DELAYS

Delays, from whatever cause, except those demonstrably caused by or on behalf of the client, shall not entitle the client to delay the scheduled completion. If there is a delay caused by or on behalf of the client, the contractor is obliged to inform the client immediately, in writing. Failure to do so will make the contractor responsible for the delay.

Compensation or additional payment as a result of delays will not be given, apart from compensation for site costs insofar as these are calculated in accordance with the contractor's tender budget and insofar as they are not already included in additional work to be charged or settled and insofar as the delay is not caused by the contractor.

To prevent delays, the contractor is obliged to submit samples of all qualifying building materials to the management for approval one month before delivery. This after having been informed of the possibility of timely delivery of the relevant building materials.

A justifiable reason for postponement of delivery is exclusively deemed to be necessary delay caused by

- the occurrence through no fault of the contractor of an unforeseen impediment not for his risk;
- the client ordering changes to the work or in the order of execution, provided there is written agreement on such changes at the time;
- failure to execute in time, in accordance with the requirements of the work, activities that do not form part of the order given to the contractor, except if and insofar as the delay can be attributed or partly attributed to insufficient adaptation and cooperation on the part of the contractor with regard to the aforementioned activities;
- suspension of the work as referred to in paragraph 14 of the UAV;

on the understanding that these causes for delay do not automatically and unconditionally lead to postponement of delivery. The contractor must provide written proof, supported by reasons, of the cause of delay in question and that it leads to the postponement of delivery requested by him.

# 91. DELAY IN WORK DUE TO REJECTION OF DRAWINGS & CALCULATIONS

Delays in the progress of the work caused by rejection of drawings and calculations to be submitted by the contractor to the management for approval shall not give rise to an extension of the deadline. The contractor must take into account in his planning that drawings and calculations submitted for approval may be rejected (several times if necessary) by the management due to imperfections. The costs of re-inspections by the principal and/or its consultants will be charged to the contractor and deducted from the next instalment invoice.

# 92. TERM EXTENSION IN THE EVENT OF ADDITIONAL WORK

Deadline extensions as a result of additional work shall only apply if this has been agreed with the management when the relevant additional work was commissioned.

Additional site costs in connection with the prolonged presence at the work of the contractor's equipment and materials must be specified and budgeted in the contract extras in accordance with the contractor's tender budget.

# 01.02.09 ACCEPTANCE AND APPROVAL

### 90. ACCEPTANCE AND APPROVAL

The contractor's written application referred to in Section 9(1) of the U.A.V. 2012 shall be in the possession of the client at least 4 weeks before the date on which the work will be completed in the contractor's opinion. The application for recording for the purpose of delivery or partial recording for the purpose of partial delivery must be accompanied by a report from the contractor's quality controller showing that the work has progressed sufficiently for such a recording to take place. The work and/or



unit will only be recorded if: - It can be reached by the principal, the management or by third parties in such a way that no unnecessary hindrance or danger is to be expected for them as a result of the other execution of the work; - All deliveries and activities relating to the work/unit to be recorded have been carried out and executed by the contractor and the work can be used "normally" for the intended purpose; - The work and/or unit including roofs and associated grounds have been completely cleaned and all parts have been cleared of all contaminants.

### **01.02.10 COMPLETION**

### 09. FILE INFORMATION - HANDOVER PROTOCOL

The building components to be distinguished in the detailed work plan shall, according to a procedure to be determined, be handed over.

After the delivery of a building section, the client is entitled to take the section into use, or to carry out work or have work carried out in it.

At the time of delivery, at least the written authorised representative for this work must be present on behalf of the contractor.

The management will draw up a "Report of Completion" with a list of remaining points. The management will send this to all parties involved for approval.

The completion date is the date of approval by the last of the parties involved.

Completion cannot therefore take place tacitly.

### 90. ADDITIONAL ACCEPTANCE

Completion means the handing over of the work, completed and ready for operation, to the Client after it has been established that the work meets the requirements of the agreement. A report of the handover shall be drawn up, to be signed by both parties.

The remaining points, as stated in the report of completion drawn up on the day of completion, must be completed within one month of completion, unless the contractor can demonstrate that a delay has occurred through no fault of his own. This must be demonstrated in writing by the contractor.

If the contractor remains in default, repairs will be carried out by the client at the contractor's expense. If the principal wishes to put the work or part of it into operation, the costs of operation and supervision shall be borne by the contractor as long as he is present at the work, in order to complete the work. Supervision and operation outside normal working hours, or when contractor's personnel are not present when the work is phased, shall be borne by the principal.

The contractor shall be obliged to warn the principal in writing in good time that damage and costs are likely to arise, if the progress of the work is hindered by the early commissioning.

Upon delivery of the entire work, shortcomings of that which has been taken into use early can only be attributed to the contractor if they are recorded in the report of the early taking into use, it concerns a hidden defect, or the client proves that these shortcomings are not the result of the early taking into use or that they could not have been detected until the delivery of the entire work.

# 91. SUPPLEMENT TO UAV PARAGRAPHS 9, 10 AND 11

In addition and derogation to paragraph 9(7) applies:

Minimum completion requirements:

- the work, the work site and the areas used by the contractor shall be clean and tidy. The client reserves the right to refuse acceptance on the grounds of other aspects weighty for commissioning.

### 01.02.11 MAINTENANCE PERIOD

### 01. MAINTENANCE PERIOD

The maintenance period shall be in months: 6



following the date of delivery of the work. The contractor must extend the maintenance/service period for installation parts, which were delivered earlier than the last delivery, equal to the maintenance/service period of the last delivery.

# 09. PREVENTIVE AND CORRECTIVE MAINTENANCE

In addition to the provisions of Section 11 of the UAV 2012, the contractor must also perform preventive and corrective maintenance of all installations referred to in these specifications in accordance with the manufacturer/supplier's regulations in force during the period referred to in clause 01.02.11 MAINTENANCE PERIOD.

### 29. REPAIR WORK AND THIRD PARTY WORK

If during the maintenance period the contractor must carry out repair work on the work, as a result of which work must also be carried out on the work of third parties, all costs arising from and related to this work shall be borne by the contractor, whose work requires repair work.

The costs shall be settled by the contractor with the third party or parties concerned without the intervention of the principal or management.

The contractor shall inform the principal in writing regarding possible third party activities.

### DEFAULT ON REPAIRS

As a supplement to paragraph 11 of the UAV: if the contractor does not comply or does not comply adequately with the orders given to him with regard to the guarantee maintenance, repairs shall be carried out by the principal, but at the contractor's expense and responsibility and without prejudice to his obligation to compensate damage of any kind.

Costs of the repairs will then be deducted from the last outstanding instalment invoice and/or recovered from the bank guarantee.

### 49. DAMAGE

In addition to Section 11(4) of the UAV, damage to the work not caused by the commissioning will remain the contractor's responsibility until the end of the maintenance period. The burden of proof in respect of the above lies with the contractor.

### 90. SUPPLEMENT PARAGRAPH 11 OF THE UAV WITH PARAGRAPH 7

The contractor undertakes during the maintenance/service period to remedy all complaints and shortcomings which should be for his account according to the applicable provisions. If he fails to do so, repairs will be carried out by the client at the contractor's expense.

### 91. PARTS COMPLETED AFTER DELIVERY

If, with the permission of the management, certain work is completed after delivery of the work owing to circumstances, the date of commencement of the maintenance period shall apply to those parts:

- the date of completion of that work. This date must be recorded in writing.

### 92. DEFINITION

Maintenance includes the repair of all defects occurring during the maintenance/service period, whereby the management's opinion as to whether a defect exists is binding on the parties.

The obligation to repair rests with the contractor, regardless of whether the defect could have been recognised as such by the management during regular supervision and upon admission/delivery, or whether it is the result of the use of defective or functionally unsuitable materials, regardless of whether these have been approved by the management.

# 93. CHANGE/EXTENSION OF THE MAINTENANCE PERIOD

For parts of the work on which serious defects are discovered during the maintenance/service period, the management may demand that the maintenance/service period be extended to 12 months after the day on which the original maintenance/service period expires.

The assessment of the seriousness of the defects shall rest exclusively with the Management Board.

# 94. GENERAL TERMS AND CONDITIONS

Terms and provisions in force during the execution of the work shall reasonably also apply during the maintenance/service term.



At the end of the maintenance/service period, the management shall draw up a final acceptance report stating that all parties have fulfilled their obligations. A fixed part of the official report is a report by the contractor, drawn up by an independent party, showing that the condition of the installations is at least in accordance with these specifications. A negative deviation between desired and measured condition will irrevocably lead to the finding that the specification obligations have not been met.

### 01.02.12 CONTRACTOR'S LIABILITY AFTER DELIVERY

### UABILITY EXCEPTION

The text section "despite close supervision" in section 12(2)(b) of UAV 2012 is deleted.

### 90. SECTION 12(1) OF THE UAV

Notwithstanding paragraph 12(1) of the UAV, the contractor remains fully liable for the correctness and completeness of the information given by him or on his behalf on the revision drawings.

# 91. SECTION 12(2) OF THE UAV

To Section 12(2) of the UAV is added:

d. for parts for which a declaration of warranty is required according to the specifications.

### 01.02.14 SUSPENSION OF WORK/COMPLETION IN UNFINISHED STATE

### SAFETY MEASURES

In consultation with the management, the contractor must take the necessary safety measures in addition to the appropriate measures referred to in Section 14 (3) UAV 2012.

# 90. SECTION 14(4) OF THE UAV

In Section 14(4) of the UAV and the subsequent paragraphs of this section, 'suspension' does not include the suspension of the work or part thereof due to the failure of the contractor to comply with the requirements set out in the specifications or regulations of public bodies.

### 01.02.15 WORK SITE

### 01. DESIGNATION OF THE WORK SITE

The contractor's own grounds adjacent to and behind the building are available as work area. In consultation with the principal.

The contractor shall ensure that the work area is accessible at all times. He will make all the arrangements necessary for the unhindered supply, movement and processing of all auxiliary materials. 01.02.16 CLOSURE, ADVERTISING

### 04. PHOTOGRAPHING AND FILMING

Permission from the principal is required for taking photographs, films or video recordings and the like of the work, cooperating therewith and giving publicity concerning the work.

### 01.02.17 PROCESSING OF BUILDING MATERIALS

### SUSTAINABLY PRODUCED TIMBER

Timber to be supplied or timber incorporated in (timber) products to be supplied, insofar as these serve for the performance of the work and remain in the work, shall comply with the Dutch Procurement Criteria for Timber, whereby it shall comply with at least 7 of the 9 principles for sustainable forest management (sustainable forest management); in accordance with the associated assessment method, as laid down on 24 July 2008 by the Minister of Housing, Spatial Planning and the Environment, Parliamentary Papers II, 2007-08, 30196, 35, including appendix 2 (hereinafter the minimum requirement). The criteria can be found at www.tpac.smk.nl, under "Documents".

1. Before timber or (timber) products are processed in the work, the contractor shall submit a statement indicating under which certification system the timber is supplied and demonstrating compliance with the minimum requirement. If the timber is supplied under a certification system, the minimum requirement is in any case met if:



- a. the competent member of government has admitted the relevant certification system to the procurement policy, or
- b. the Timber Procurement Assessment Committee (TPAC) has assessed that the certification system complies with the Dutch Procurement Criteria for Timber, whereby it complies with at least 7 of the 9 principles for sustainable forest management. An overview of admitted and assessed certification systems can be found at www.tpac.smk.nl or www.inkoopduurzaamheid.nl.
- 29. BRANDED PRODUCTS
- By way of derogation from Section 17(5) UAV 2012, for the products and/or brand names mentioned in these specifications, read 'or equivalent'.
- If an equivalent product is used, the contractor must submit comprehensive comparative technical documentation in good time, on the basis of which the contractor demonstrates equivalence to the technical/functional specifications stated.

### 01.02.18 INSPECTION OF BUILDING MATERIALS

### 01. INSPECTION OF BUILDING MATERIALS

The building materials to be approved by the management as referred to in section 17 paragraph 2 and section 18 paragraph 1 of the UAV 2012 are the following: all building materials.

# 15. SAMPLES FOR ASSESSMENT

Before the contractor orders the building materials listed below, a sample of them must be submitted to the management for evaluation:

The samples listed below shall be sampled for assessment by the management on the following listed characteristics.

Assessment characteristics:

- colour;
- surface treatment;
- qualitative properties.

Samples to be supplied:

- All materials in view.

The samples must be named in a sample book to be sampled at a time, to be determined by the management.

# 90. INSPECTION OF PREFABRICATED PARTS

Contrary to Section 18(8) of the UAV, inspection shall take place after assembly in the work and shall be added to this paragraph:

'Inspection of prefabricated parts will also take place at random in the relevant factory or workshop.

### 01.02.19 OWNERSHIP OF BUILDING MATERIALS

### 03. REMAINING CONSTRUCTION MATERIALS

The provisions of section 19 (3) of the UAV 2012 shall not apply to building materials made available by the principal.

# 01.02.20 CARE OF BUILDING MATERIALS

# 90. CARE FOR BUILDING MATERIALS

Transport, storage and processing of building materials must take place in accordance with the provisions belonging to certifications and/or in accordance with the guidelines of the relevant manufacturer/supplier. The contractor must provide the management with a copy of the aforementioned guidelines.

91. PROTECTION OF BUILDING MATERIALS



The contractor must take adequate protective measures wherever damage and/or contamination of building materials at the work or the work of third parties can be expected. Damaged building materials may not be processed.

### 01.02.21 OLD BUILDING MATERIALS

### 01. OWNERSHIP OF OLD BUILDING MATERIALS

The following old building materials originating from the work become the property of the contractor and must be removed by him:

- all building materials.
- with the exception of:
- those materials which the client wishes to retain. The client shall inform the contractor in good time which materials he wishes to retain.
- materials that may have monumental value; disposal must first be approved by the client.

Materials and parts derived from demolition, which will remain the property of the client, must be properly managed, sorted, transported to and stored at a place to be specified by the contractor.

### 01.02.22 GUARANTEE FOR A COMPONENT

### 01. PARTS TO BE GUARANTEED

A guarantee shall be required for the following components which shall be effective from the completion of the component until the completion of the work and thereafter for the period specified.

Component: all installations as described in the specifications

- to be guaranteed by: the contractor of these specifications
- guarantee period: 12 months following the date of completion of the work.

### 05. STATEMENT OF GUARANTEE

With regard to parts for which a guarantee is required from a subcontractor or supplier, a declaration of guarantee in accordance with the model attached to these specifications shall be submitted to the: management.

Upon delivery of, or if applicable, before completion of, the guaranteed component.

In addition to section 22(3) of the UAV 2012, the guarantee conditions of the subcontractor and/or supplier will not be accepted by the principal, unless otherwise stated in these specifications. If the (sub)contractor and/or supplier must carry out necessary maintenance work for this purpose during the guarantee period in order to honour the guarantee, these costs are deemed to be included in the contract sum of these specifications.

### 90. MANUFACTURER/SUPPLIER GUARANTEES

Guarantees issued by the manufacturer and/or suppliers that exceed the duration of the period stated in the specifications shall continue to apply in full to the transferee of the guaranteed good and shall also remain in force on transfer of the good within the guarantee period stated by the manufacturer and/or supplier.

# 01.02.26 GENERAL SCHEDULE, WORK PLAN

# 01. GENERAL TIME SCHEDULE

The classification of time periods on the general time schedule shall be indicated in:

- calendar weeks.

### 06. DETAILED WORK PLAN

A detailed work plan, as referred to in Section 26(6) of the UAV 2012, shall be required For:

The whole of the contractor's and third parties' work.



Work plan requirements:

- the sequence of the work;
- the times when the data for the documents to be produced by the contractor will be available;
- the duration of the work;
- the times when the documents to be produced by the contractor will be available for approval;
- the times when the working drawings to be produced by the contractor will be available;
- the times when the working drawings to be produced by the principal will be available;
- the times when the details of the management supplies and/or third parties must be known;
- the times of delivery of installations or parts thereof and activities to be carried out by the principal and/or third parties, in consultation with the management, the advisors and/or third parties involved;
- the times of testing.

The classification of the duration in the detailed work plan must be indicated in:

- calendar days.

Time at which the work plan must be submitted: no later than 14 working days after assignment.

### 90. TIME OF SUBMISSION OF THE DETAILED WORK PLAN

If the contractor fails to submit the detailed work plan to the management for approval within the said time limit then payment to the contractor shall be suspended until the day, when the detailed work plan is approved by the management.

01.02.27 DIARY, LISTS, REPORTS, CONSTRUCTION MEETINGS

### 07. LISTS TO BE PROVIDED

The lists referred to in Section 27(7) of the UAV 2012 shall be required.

### 08. REPORTS TO BE PROVIDED

The reports referred to in Section 27(8) of the UAV 2012 shall be required.

### CONSTRUCTION MEETINGS

Construction meetings as referred to in paragraph 27(9) of the UAV 2012 will be held:

- once every fortnight.

### 19. INSTRUCTIONS

Notwithstanding Section 27(1) of the UAV 2012, the contractor will supply the notes for drawing up the weekly report.

The above details must be submitted digitally to the management no later than on the fourth working day after the end of the working week to which they relate.

# 90. SPECIFICATION ITEMS BASED ON THE STABU SPECIFICATION SYSTEM

Specification changes, the additional and less work and the processed quantities, as well as the spending/filling of any set items, must be processed by the contractor in specification items according to the STABU specification system and bundled in order and coding in accordance with the specification. Number:

- for approval: 2

- approved: 2

The approved specification items must be provided, in electronic form, in the so-called STABU Exchange Format (SUF) to the principal.

Electronic information medium:

- USB stick or similar.

Time: no later than 10 working days after approval.

### 91. WORK MEETINGS

Work meetings with third parties, subcontractors, municipal services, utility companies and the like, will have to be held by the contractor as often as the contractor and management deem necessary.

The contractor shall prepare minutes and/or reports of these work meetings and provide them to the parties concerned and the management.

These minutes shall be included in the minutes of the next construction meeting.



Number: 1

Time: no later than 5 working days after the meeting. And no later than 5 days

before the next construction meeting.

### 92. DRAWING UP OF WEEKLY REPORTS

Contrary to the provisions of paragraphs 1 to 5 of Article 27 of the UAV weekly reports will be drawn up by the contractor in consultation with the management. the management.

### 01.02.28 DEMARCATION, SOUNDINGS AND MEASUREMENTS

02. PEIL

The level P is:

- the top of the finished floor of: the entrance

### 01.02.29 DIFFERENCES IN DIMENSIONS OR CONDITION

### HARMFUL OBJECTS OR SUBSTANCES

If, during the execution of the work, objects or substances are encountered whose presence is not mentioned in these specifications or need not be expected and which can be expected to cause damage to persons, goods or the environment, the contractor shall immediately inform the management. He will immediately take the required safety measures, if possible in consultation with the management. If the contractor fails to do so, he shall be liable for the damage resulting from the failure to report or take measures in good time.

# 90. DIFFERENCES IN THE WORK

Minor deviations (to be judged in reasonableness and fairness by the management) in the dimensions and condition of the work in relation to the details mentioned in the specifications or on the specification drawings shall not give rise to more or less work being settled and/or an extension of the deadline.

### 01.02.32 FOUND OBJECTS

# 01. INTERRUPTION OF THE WORK

If the execution of the work or part thereof has to be interrupted due to the finding of objects as referred to in paragraph 32 of the UAV 2012, the damage suffered by the contractor as a result of this interruption shall be compensated.

# 09. OWNERSHIP OF FOUND OBJECTS

Unforeseen objects coming from the work remain the property of the principal, unless the management declares that they are of no value to the principal. In the event that these objects remain the property of the principal, any resulting costs shall be reimbursed to the contractor pursuant to section 29(3) of the UAV.

### 01.02.34 CHANGES IN EXECUTION

# DEVIATION FROM SECTION 34(1) OF THE UAV

In deviation from the provisions of Section 34(1) of the UAV:

- Changes made by the management or the principal in the execution of the work do not give the contractor a claim for additional payment, unless more is required of him than can be expected of him. In the event that the contractor is of the opinion that the changes made by the management or the client in the execution of the work will entitle him to an additional payment, he will not proceed with the execution until he has notified the management in writing and the client has instructed the changes in writing. In the absence of a written order from the client, the contractor shall not receive any additional payment.
- The data from the itemised tender budget will be used as the basis for settling the above changes in the execution of the work.



### 90. CHANGES IN EXECUTION METHOD

Changes in the method of execution desired by the contractor must be submitted in good time to the management for approval, including the documents required for proper assessment and decision-making.

### 91. CHANGES BY THE CONTRACTOR

Other methods of execution proposed by the contractor must be coordinated in advance by the contractor with the other contractors, including in financial terms.

Approval by the management of other methods of execution proposed by the contractor may under no circumstances lead to the contractor or other contractors charging for additional work.

Despite its approval, the management accepts no responsibility for the soundness of the contractor's relevant proposals.

The costs of any production of new, or modification of existing drawings and calculations as a result of these proposals shall be borne by the contractor, as shall the costs of any architect, structural engineer, other consultants, etc. to be engaged, including additional costs such as disbursements and the like.

### 01.02.35 SETTLEMENT OF ADDITIONAL AND REDUCED WORK

# 09. SETTLEMENT OF ADDITIONAL AND REDUCED WORK

In deviation from or in addition to paragraphs 35-39 of the UAV, the following provisions apply:

A Every quotation, made in quadruplicate, must not be intended to be non-binding

and must state:

- 1st item material;
- 2nd item third-party work;
- 3rd item number of assembly hours x the tender hourly rate;
- 4th reference number ..... sequence number.

B When calculating additional work and provisional sums, the contractor will be able to charge the net prices of materials to be

charge the net prices of materials (excluding VAT), as they apply on the day of the quotation, increased by the applicable mark-up percentage for all costs and profit imposed on the materials. C The same rule mentioned under B shall apply to the work of third parties (excluding VAT), who perform the relevant additional and less work with the approval of the management, increased by the applicable mark-up percentage.

D The prices of materials and/or work by third parties, as applicable on the day of tendering, plus the relevant mark-up percentages, will be used for any contract reductions.

E The relevant mark-up percentages must be stated by the contractor when submitting the tender.

The costs below must be included in these mark-up percentages:

- 1. Staffing during maintenance term, as well as other costs of that term, including travel and accommodation costs.
- 2. Depreciation on tools and usual installation equipment.
- 3. Own accommodation of the installation company.
- 4. Drawing costs etc. (sparing, assembly and revision drawings, operating instructions).
- 5. General operating costs, such as administration, warehouse, purchasing, telephone and postage costs (both at the company, and at work).
- 6. Management, technical staff, project management, assembly insp, chief mechanic and third parties as well as related travel and accommodation costs.
- 7. Material transport costs (including breakage risk).
- 8. Construction site costs.
- 9. Damage insurance premiums for (additional) insurance of the work.
- 10. Business risk and profit.



F The contractor will be able to charge the (shift) hourly rate stated on the tender form for labour wages to be settled as additional and/or reduced work and set items, including all costs, charges, profit and drawing costs related to the wages.

G The wage and material prices for additional work and set items are excluded from any risk adjustment. H Deviations arising from the drawings accompanying the specifications in the final determination of the pipeline route and location of connection points, as well as the layout of technical areas, will not be eligible for settlement.

I Description of materials and work by third parties:

### **Net materials**

Net materials are understood to be the materials included at the net price, i.e. the price negotiated by the contractor, reduced by all discounts in his favour and actually paid by him to the supplier, excluding VAT. For materials for which a project price has been stipulated by the consultant/client, the net price will be the net project price stipulated by the consultant/client.

# **Specific materials**

These are all materials which must be specially manufactured for the structure in question, such as boilers, cooling machines, cooling towers, air treatment units, fans, foundation pumps, pressure boosting installations, boilers, etc.

### **Generic materials**

This refers to all materials that do not fall under the specifics.

Works by third parties

This includes all work that is subcontracted.

# 90. TRANSFER PRICES

Unless expressly agreed otherwise, the transfer prices stated in the building contract include all direct and indirect costs for the execution as shown in the contractor's tender budget, as well as a contractor's fee. The contractor's fee includes general costs, other execution costs, profit and risk.

# 91. CONSTRUCTION SITE COSTS

The costs at the construction site for general fitting-out, care and execution are not settled separately, but are always deemed to be included in the contract price of the additional work, even if the additional work results in an extension of the deadline.

# 92. DETAILED QUOTATION

The possible financial consequences of changes to specifications shall in any case be in the possession of the management, by means of a detailed quotation, within 5 working days of the request for changes. The management will inform the contractor of the client's position within 10 working days of the price offer.

If the price offer is received later, the specification amendment shall be settled at a price set by the management, without prejudice to the principal's right to order the (execution of) specification amendment and the contractor's obligation to carry it out on the basis of the cost estimate to be drawn up by the management.

# 93. CONSEQUENCES FOR THE CONSTRUCTION PERIOD

Any additional work quotation will include any consequences of the execution of the additional work on the construction time.

# 94. COST STATEMENT

Cost statements for settlement of additional and less work and specification changes should be price fixed until the end of the work.

### 95. OVERVIEW OF ADDITIONAL AND LESS WORK

In consultation with the management, the contractor should, in addition to the detailed price quotation, prepare an overview indicating:

- submission date of the offer;
- reference of the offer;



- the version of the offer;
- brief description/drawing of the work;
- any impact on the work plan of the contractor and third parties;
- the initiator/reason for the change.

An updated list of additional/less work in Excel format should be supplied with each additional/less work tender.

### 96. FINAL SETTLEMENT

Paragraph 35(5) of the UAV is deleted.

### 97. TENDERS FOR ADDITIONAL WORK

The management itself may request tenders for additional work.

In fairness, tenders requested by the management for additional work must be accepted by the contractor if the principal so wishes.

### 01.02.36 CHANGES TO SPECIFICATIONS

### AUTHORITY TO MAKE CHANGES TO SPECIFICATIONS

The authority to make changes to the specifications as referred to in Article 36(2) of the UAV 2012 is reserved for the principal.

is reserved for the principal.

### 01.02.37 PROVISIONAL SUMS

### OVERVIEW OF PROVISIONAL SUMS

The provisional sums as referred to in Section 37 (1) of the UAV 2012 are the following:

### TENDERS FOR STAGING POSTS

With due observance of Section 37(12) of the UAV, the management itself may request quotations for scaffolding.

In fairness, quotations requested by the management for ancillary items must be accepted by the contractor if the principal so wishes.

The same structure as for more/less work must be used for the submission of provisional sums with regard to specification.

# 01.02.40 PAYMENT

# 02. PAYMENT IN INSTALMENTS

Payment of the contract price shall be made in instalments, with bank guarantee.

The instalments, based on the state of the work, shall be as a percentage of the contract sum:

### 14. DECLARATIONS ON THE BASIS OF THE RISK SCHEME

Declarations of settlements under a risk scheme shall be submitted to the management in the name of the principal separately and no later than two months after the first official publication of the wage and material indices required for this purpose.

# 90. PAYMENT FOR ADDITIONAL AND REDUCED WORK

The additional and reduced work shall be settled at the end of the project as in balance of the totals of the extra and less work.

If before delivery, the balance amount of the totals of the approved and executed additional and reduced work exceeds €50,000 excl. VAT, the contractor may submit an advance invoice of €25,000 excl. VAT.

### 01.02.42 DISCOUNTS

### 02. REBATE AMOUNT

The discount, as referred to in paragraph 42 (2) of the UAV 2012, amounts to per day: Euro: 500



# 90. DISCOUNT FOR LATE COMPLETION OF RESIDUAL POINTS

In addition to Section 42 of the UAV, a discount shall also apply in the event of failure to complete the remaining points established on completion on time, belonging to the official report of completion. The discount for failure to complete and sign off these residual points on time amounts to €2.000, exclusive of VAT, for each calendar day that the term set in the official completion report is exceeded.

### 91. DISCOUNT IN CASE OF DEFAULT

If, after written summons, the contractor fails to act in accordance with the provisions of the specifications or with the orders of the management, he shall be in default and the management may impose a discount on the contractor.

This discount shall amount to €2.000 per calendar day, excluding VAT.

# 91. DISCOUNT FOR DEFAULT

If, after written summons, the contractor fails to act in accordance with the provisions of the specifications or with the orders of the management, he shall be in default and the management may impose a discount on the contractor.

This discount shall amount to €2.000 per calendar day, excluding VAT.

### 01.02.43 PLEDGE OR ASSIGNMENT/SECURITY/INSURANCE

### 01. BANK GUARANTEE

The contractor must provide a bank guarantee issued by a bank or insurance company for the benefit of the principal as soon as possible after the work has been assigned to him, but no later than before the first instalment appears.

The bank guarantee must be drawn up in accordance with the model annexed to these specifications. The value of the bank guarantee amounts of the contract sum in (%): 5

If the said bank guarantee has not been received and approved before the appearance of the first instalment, an amount will be withheld from the first and, if necessary, subsequent instalments until the sum of these deductions will have reached the amount of the bank guarantee. The amount withheld will be settled after the above-mentioned bank guarantee will be received and approved.

Within 14 days of the expiry of the bank guarantee, the documents submitted for the purpose of the bank guarantee will be returned to the contractor.

NOTE: If there is delayed delivery of planting work and/or exterior painting work, the consequence of this in relation to the possible continuation of the security deposit and its extent may be described here.

### 01.02.49 SETTLEMENT OF DISPUTES

### 02. MEDIATION

NOTE: include this provision if there is a desire to submit a dispute to a mediation procedure before proceeding to arbitration.

If the parties so agree, in explicit deviation from the provisions of Section 49 (2) of the UAV 2012, all disputes of any kind - including those that are only regarded as such by one of the parties - that may arise between the principal and the contractor as a result of the agreement or of agreements that may be a result thereof, will be subjected for settlement to a mediation procedure in accordance with the regulations of the Netherlands Mediation Institute (NMI) in Rotterdam, as they read on the day on which the agreement to which the dispute relates came into effect.

If mediation has ended without agreement being reached by the parties, the dispute shall be settled by arbitration as referred to in section 49 paragraph 2 of the UAV 2012.

# 06. EXTRAORDINARY MEMBERS OF ARBITRATION TRIBUNAL

NOTE: DO NOT include this provision if the settlement of disputes arising from the building contract has been assigned to an arbitration institute other than the Arbitration Board for the Construction Industry.



If one of the parties so requires, one of the members of the arbitral tribunal shall be chosen from among the extraordinary members of the Arbitration Board for Construction or appointed by the chairman of that Board. In this case, the arbitral tribunal shall always consist of three members.

### EXTRAORDINARY MEMBERS OF THE ARBITRATION TRIBUNAL

In addition to Section 49(2) of the UAV 2012: The arbitral tribunal shall always consist of three arbitrators where One of the arbitrators belongs to the member-lawyer of the Board of Arbitrators of the Arbitration Board for the Construction Industry who acts as chairman of the arbitral tribunal.

### 90. ARBITRATION

Notwithstanding Article 12(1) of the Arbitration Rules of the Board of Arbitration for the Construction Industry, the arbitral tribunal shall rule "according to the rules of law".

### **01.03 INSURANCES**

# 01.03.10 INSURANCE BY THE CONTRACTOR

# 01. CAR INSURANCE BY THE CONTRACTOR/SECTIONS

Without prejudice to his liability, the contractor shall take out Construction All-Risks (CAR) insurance which shall cover: all material damage and/or loss or destruction irrespective of the cause thereof, all this setting aside the provisions of Article 7:951 of the Civil Code.

The choice of insurer(s) and the content of the policy require the approval of the: principal.

The duration of the insurance shall be from the commencement of the work(s) up to and including the day on which the work(s) is (are) deemed to have been completed in accordance with Section 10(1) or (2) of the UAV 2012 and, in the event of an agreed maintenance period(s), subsequent to that during the agreed maintenance period(s). The cover includes the following sections with the deductible specified therein.

There must be a provision, showing that the insureds and their employees, subordinates and persons for whom the insureds are liable are considered third parties among themselves and in relation to each other.

# 02. CAR INSURANCE PARTIES/COVERAGE/EVIDENCE/CANCELLATION

The policy lists the contractor as the insured. The following should be named as co-insureds:

- the client.
- the architect(s) and consultant(s).
- the management.
- subcontractors.

The insurance must have full primary operation/coverage for the Section The Work.

The insurance must include any completion commission payable in the event of a claim.

Uninsured loss(s) and excess(s) shall be borne by party responsible for the loss or otherwise by the party responsible for the work. Excesses shall apply per event/event or series of events/events arising from the same cause and shall not cumulate.

After the day on which the work is regarded as delivered in accordance with section 10 (1) or (2) of the UAV 2012 up to and including the day on which the maintenance period(s) ends, cover is limited to material damage to the work(s) and loss or destruction arising from the performance of the obligations arising from the maintenance period(s) and material damage to the work(s) and loss or destruction that manifests itself after the day of delivery for which the cause is the work:

The contractor shall submit the supporting documents evidencing the conclusion of the insurance policy to the:

The contractor shall stipulate that, in the event of cancellation of the policy, the relevant insurer, broker or intermediary shall notify the principal by registered letter and that the insurance shall continue for fourteen days after the said letter has been sent, during which period the principal shall be entitled to



take out a new insurance policy on the same terms and conditions at the contractor's expense. The premium and costs paid on that account shall be deducted from the contract price.

O3. CAR INSURANCE CONTRACTOR, DURATION IN THE EVENT OF DELIVERY IN PARTS
For those parts of the work which, in accordance with the provisions of Section 1(2) of the UAV 2012 are regarded as separate work, the insurance for that part shall end when the maintenance period for the last part delivered has expired.

### 05. DESIGN INSURANCE CONTRACTOR

If the design for the work was created by a construction team in which the contractor participated, or if the contractor offered a variant for the work or part thereof, which variant was assigned to him, the contractor must take out design insurance. This insurance should provide cover for the liability of the codesigning contractor for pure financial loss, such as, inter alia, improvement costs, damage repair after the maintenance period, business losses and evacuation/housing costs.

The sum insured under this policy should be at least 10% of the contract sum with a minimum of. EUR 250,000 per claim.

The choice of insurer(s) and the content of the policy shall require the approval of the client.

# 90. THIRD-PARTY LIABILITY (WA) BY THE CONTRACTOR

Without prejudice to his liability, the contractor shall take out third-party liability insurance on the policy conditions customary in the Netherlands, up to an amount of EUR 2,500,000 per claim, disregarding the provisions of Article 7:951 of the Civil Code.

Clauses 01.03.10-19. and 01.03.10-29. shall also apply to this insurance. Contrary to the provisions of section 6.8 and section 44.1 and 44.3 of the UAV 2012, the principal waives vis-à-vis the contractor

- his claims for compensation for damage to the works connected with the work, and
- his statutory claims for damages,

insofar as these claims exceed EUR 2,500,000 per claim.

The choice of insurer(s) and the content of the policy shall require the client's approval.

The duration of the insurance runs from the commencement of the work(s) up to and including the day on which the work(s) is (are) deemed to have been completed in accordance with section 10, paragraph 1 or 2 of the UAV 2012 and, in the event of agreed maintenance period(s), during the agreed maintenance period(s) following on from that.

### 91. INSURANCE POLICY PARTIES/COVERAGE/EVIDENCE/CANCELLATION

The policy lists the contractor as the policyholder.

The contractor submits the supporting document, evidencing the conclusion of the insurance, to the principal as soon as possible, in any case within One week, after the day on which the contractor is assigned the work.

Proof of insurance shall also include a written declaration by the insurer that insurance has been taken out on the work in compliance with provisions 01.03.10-90, -91 and -92 of these specifications.

# 92. INDEMNITY INSURANCE DURATION IN CASE OF DELIVERY IN PARTS

For those parts of the work which, in accordance with the provisions of section 1, paragraph 2 of the UAV 2012 are regarded as separate work, the insurance for that part shall end when the maintenance period of the last part delivered has expired.

# 01.03.40 INSURANCE BY OR ON BEHALF OF THE CLIENT

O1. CAR INSURANCE BY OR ON BEHALF OF THE PRINCIPAL

CAR insurance for the benefit of the work shall be taken out by the:

- building contractor.



The conditions and provisions thereof are attached to the specifications as an annex in accordance with section 43b paragraph 2 of the UAV 2012.

### 01.04 SETTLEMENT OF CHANGE COSTS AND PRICES

01.04.10 SETTLEMENT OF CHANGE COSTS AND PRICES

01. CHANGE COSTS AND PRICES NOT OFFSETTABLE

Not offsettable are changes to:

- labour costs.
- material prices.
- fuel prices.
- rents.
- freights.
- all changes in project costs and prices.

### **01.05 DRAWINGS AND CALCULATIONS**

### 01.05.10 DRAWINGS AND CALCULATIONS

### 02. RESPONSIBILITY FOR DRAWINGS

The contractor shall remain responsible, even after approval by the management, for the drawings made by him concerning the constructions, working methods, dimensions and the like, unless application of this provision would lead to unreasonable results.

### 03. CHANGES TO DRAWINGS

When changes are made by the contractor to the drawings made by him, whether or not recorded digitally, in accordance with section 6 paragraph 2 UAV 2012, this will be indicated on the original by means of a change in number and date. The contractor shall register and distribute these drawings. Older versions of the drawings shall lapse after approval by the management.

#

\If the contractor cannot agree to changes desired by the management, he shall notify the management in writing.

The changes concerned must be clearly indicated on the drawings. E.g. by means of change arrows showing the date of change.

### 04. RESPONSIBILITY FOR CALCULATIONS

Even after approval by the management, the contractor remains responsible for the calculations he has made, unless application of this provision would lead to unreasonable results.

### 01.06 WORKING CONDITIONS

### 01.06.10 WORKING CONDITIONS

# 01. SAFETY AND HEALTH PLAN

The safety and health plan (H&S plan) referred to in Article 2.28 of the Working Conditions Decree (Stb 1999.451) forms part of these specifications.

# 03. H&S COORDINATION OF THE EXECUTION PHASE BY THIRD PARTIES

NOTE: for the contractor who does not have H&S coordination for the execution phase.

Pursuant to the provisions of Article 2.29 of the Working Conditions Decree, one or more coordinators (H&S coordinators) for the execution phase shall be appointed to carry out the coordination tasks mentioned in Article 2.31 of the Working Conditions Decree. These tasks are performed by the:

- construction contractor

90. H&S PLAN EXECUTION



No later than the fifteenth working day after the day on which the work is assigned, the contractor shall submit a "H&S plan execution" to the management.

The "H&S plan execution" will be regarded as a detailed work plan within the meaning of section 26(6) of the UAV.

The aforementioned "V&G plan execution" shall include at least the following information:

- a. The manner in which the applicable laws and regulations, standards and other health and safety requirements will be met;
- b. The risk register and the method of risk inventory and evaluation regarding H&S risks;
- c. Method of reporting, reporting and handling incidents and (near) accidents;
- d. The measures for the passability of the work site for man and machine during the term of the work (according to the CUR/CROW/Arbouw report 2004-1 "Assessment system for the passability of construction sites" as it reads three months prior to the day of tendering);
- e. Description of how the H&S file will be kept up to date.
- f. The H&S plan should also include subcontractors and possible suppliers performing work on the work.

The H&S plan for the design phase is attached as an appendix.

91. H&S COMMUNICATION

At each construction meeting, the contractor shall ensure, that "safety and health at work and in the surroundings" is put on the agenda.



### **TECHNICAL PROVISIONS AND WORK INSTRUCTIONS**

### **05 CONSTRUCTION SITE FACILITIES**

### **05.00 GENERAL**

### 05.00.20 REQUIREMENTS AND EXECUTION: GENERAL

### 90. GENERAL

The management may prohibit the use of tobacco in places and at times to be specified by it; it shall also have the power to prohibit the production and/or reproduction of music by instruments, devices, appliances and the like.

The use of alcoholic beverages, drugs and other hallucinogenic or stimulants, as well as entering or working on or in the building, under their influence is strictly prohibited. Violation of this provision will result in immediate removal of the person(s) concerned, without the contractor being able to invoke malpractice on the part of the client/management.

### 05.00.24 REQUIREMENTS AND EXECUTION: CONSTRUCTION SITE EQUIPMENT

### 01. LAYOUT AND USE OF WORK SITE

With regard to the layout and use of the work site, the following restrictions shall apply:

- a. The layout of the work site and the construction site shall require the approval of the management.
- b. The entire work must be carried out on working days in normal working hours, unless otherwise indicated on the schedule or stated in the specifications or decided otherwise with the approval of the management;
- c. all supply of materials must take place during normal working hours. Deviations from this must be reported to the management
- d. all roads and entrances on and around the work site may never be blocked by construction work or construction traffic during the construction; and
- e. Temporary storage of materials and equipment outside the designated construction site and work site is not permitted.
- f. The contractor may not park on his own site.
- g. The contractor must use the public paid parking spaces around the premises. Parking charges shall be borne by the contractor.
- h. No flammable materials or equipment and chains etc. may be placed within a distance of 5 metres from the outside of the monument.
- i. T. b. for supply and removal of materials and equipment, the contractor must take into account the local traffic regulations in force.
- j. For external work on the monument, only vehicles (aerial platform forklift truck, etc.) fitted with an electric motor and/or equipped with a special soot extraction system are permitted.
- k. After completion, the entire work site must be cleared and cleared of remaining construction material and waste.

### 02. DISPOSAL OF WASTE

Separate construction site waste into:

- (hazardous) waste, as referred to in the Eural (2000/532/EC) and (2001/118/EC).
- stony demolition waste.
- gypsum blocks and plasterboard material.
- bituminous roof covering.
- tarred roofing materials.
- asphalt containing tar.
- Unsaturated asphalt.



- Roofing gravel.
- residual waste.

Remove construction site waste from work site.

### 03. BURNING DIRT AND OTHER BUILDING MATERIALS

Burning dirt and other building materials on the work site is not permitted.

### REMOVAL OF RUBBLE, WASTE AND PACKAGING MATERIAL

The removal of rubble, waste and packaging material from third parties is is part of the contractor's obligations.

# 90. DISPOSAL OF HISTORICAL MATERIAL

All natural stone, brick, and other old materials coming from the work

are the property of the client. The client decides which

materials may be disposed of. Materials released for disposal become the property of the contractor. In terms of costs, subcontractors should bear in mind that all components to be demolished should be disposed of in the contractor's rubble container.

### 05.00.30 INFORMATION TRANSMISSION: GENERAL

### 01. PROVISION OF ENERGY BY THE PRINCIPAL

Energy will be made available to the contractor by the principal at the contractor's request:

- electrical energy

The cost of consumption shall be borne by

the contractor.

Before starting work, meter readings must be recorded or an intermediate meter must be installed.

### 05.00.30 TRANSFER OF INFORMATION: GENERAL

### PROVISION OF WATER BY THE PRINCIPAL

Drinking water will be made available to the contractor by the principal at the contractor's request. The costs for the use of drinking water shall be borne by the contractor.

Before starting work, meter readings must be recorded, or an intermediate meter must be installed.

# 05.00.50 ASSOCIATED OBLIGATIONS: GENERAL

# 90. CONTROL OF DIMENSIONAL DEVIATIONS

The contractor is obliged to check the measurements on drawings in the work. The contractor must immediately report deviations from dimensions to the management.

Minor dimensional deviations shall not give rise to settlement.

### **05.31 SHEDS AND CHAINS**

### 05.31.10-a BUILDING EQUIPMENT

# BUILDING EQUIPMENT

### Space(s):

- accommodation area for staff, foreman and management
- portal
- kitchen
- toilet

### as per regulations

### .01 TEMPORARY FACILITY

Shelter for staff, contractor/director, at a location to be specified on the site, at the time of execution of the work



# 05.32 PROVISION OF EQUIPMENT 05.32.09-a STEIGER WORKS

### STEIGERWORK

To be placed by the contractor, t. p. v.:

### Exterior

- Install scaffolding to carry out the work, in accordance with the Scaffolding Directive;
- Scaffolding works must comply with the RBO guidelines.
- Scaffolding works to be provided with scaffolding netting (type 50%, wind-permeable) colour white
- cover the gutters and roofs under the scaffolding.
- remove debris and dirt from gutters every time after work is completed.
- Scaffolding works on the public road should be shielded against climbing in

### **Timing**

Scaffolding must be removed, in consultation with management, but no later than one week after the 1st notice.

### .01 TEMPORARY PROVISION

Erection of necessary scaffolding for the work.

### 05.32.19-a INTERIOR PROTECTION

### FLOOR PROTECTION

To be fitted by the contractor:

- cardboard sheeting as protection against contamination from construction work of floors to be maintained in situ.

### Time period:

The cardboard sheeting must, in agreement with the management, but removed within one week of the first notice.

### 9. WORKS

### Work:

- Part of floor space situated along the inner side outside walls where work is being carried out is to be fitted with a stucco loop (cardboard sheet) floor protection. With min. width 0.9 m1.

The cardboard sheeting must be of such quality, thickness and smoothness that it offers the floor to be protected sufficient resistance to any damage or dirt caused by the construction work. The stucco course (cardboard sheeting) must also be walkable and, if necessary, passable with a rolling scaffold.

- Apply stucco (cardboard sheet) to floors with adhesive tape, cover the seams between the tape off the seams between the cardboard sheets.
- When removing the stucloop (cardboard sheet) floor protection from the floors, clean the floors completely of tape residue and/or tape adhesive residue.

### .01 TEMPORARY PROVISIONS

For the purpose of painting inside exterior window frames

### 05.34 CLEANING AND PREVENTIVE MAINTENANCE

# 05.34.10-a CLEANING AND PREVENTIVE MAINTENANCE

### REMOVAL OF STICKERS/MARKINGS

On acceptance, the contractor shall deliver the completed work and the work site thoroughly cleaned. This means that all parts of the work as well as the work site will be delivered clean in the broadest sense of the word and that all construction residues, stains, dirt and excesses have been removed, including those resulting from activities by third parties.



All floors and roofs are to be delivered swept clean. Clean all facades, glazing, sanitary facilities, mirrors, tiles, etc. of stickers, paint and mortar splashes.

This cleaning also includes all spaces hidden from view under floors and behind walls, shafts, wells, ceilings, etc.

If third-party property and/or works are soiled as a result of the execution of the work, the contractor must clean them.

Cleaning must be carried out by a recognised cleaning company (OSB).

.01 BUILDING SECTIONS GENERAL

Cleaning the work for the purpose of handover.

#### **05.41 LAYOUT OF WORK SITE**

#### 05.41.09-a WORK AREA PLAN

0. WORK SITE LAYOUT PLAN

To be provided by the contractor.

It shall include at least the following information:

#### work site:

- the fencing off of the work site using fencing.
- the scaffolding and screening of the work area exterior.
- The roof parts provided with protection (plywood/ Styrofoam).

of the exterior.

#### construction site:

- the fencing off of the construction site with plastic bases.
- the location of the building site.
- the contractor's chain park at the construction site.
- the temporary roads and pavements on or to the site.
- the storage area for materials at the construction site.
- parking spaces for construction site personnel, on or near the construction site. construction site.

Number of copies to be provided:

- for approval (st.): 2.
- approved (st.): 2.

#### .01 SITE GENERAL

The layout plan for the purpose of the work site and construction site.

#### 05.42 FENCING AND ADVERTISING

## 05.42.11-a CONSTRUCTION FRAMEWORK

0. CONSTRUCTION FENCE

Height (m): minimum 2m Openings: as required

- The construction fence must be lockable, including the necessary lockable access gates.
- If necessary, the contractor is responsible for moving the fences during the work.

.01 TEMPORARY PROVISION

The construction fence at the front of the building site



## 10 PROPPING AND DEMOLITION WORK

#### **10.00 GENERAL**

#### 10.00.10 TERMS: GENERAL

### 90. ENVIRONMENTALLY AWARE AND SELECTIVE DEMOLITION

In addition to limiting dust, noise and vibration nuisance for local residents, environmentally aware and selective demolition is understood in these specifications:

The working method whereby all material, whenever possible, is reused or made suitable for reuse. This is to minimise environmental impact.

#### 10.00.20 REQUIREMENTS AND IMPLEMENTATION: GENERAL

#### 90 WORKS

- The contractor shall perform all work indicated on drawings and in specifications and resulting from the work.
- Carry out all work in consultation with and only after the approval of the management, especially the removal and processing of historical materials, such as cap components, brick and stone work, etc. Parts not indicated as such on the specification drawings without consultation yet demolished or lost must be be redelivered and replaced by the contractor free of charge.
- Demolition work must be carried out in such a way that adjacent materials are not damaged. If this is nevertheless the case, they must be repaired at the contractor's expense.
- The contractor shall be fully responsible for the demolition work, making proper shearing, stamping etc. to the requirement of the work and in the proper order. Repair work shall be carried out as directed by the management.
- To make the necessary breaking work for inserting anchors, chocks etc., arising from the work.
- Parts that are intended for reuse or are required for reproduction, for example, must be carefully removed from the work.
- The contractor must ensure that demolition work is carried out in such a way that passers-by can safely pass the building.
- All supporting works resulting from the work and necessary for correct execution must be carried out.
- Temporary supports that are necessary for the stability of existing structures and/or safety:
- propping work which the management considers to be additionally necessary. deemed necessary by the management.
- Prop and shoring work must always be considered in conjunction with the demolition work and the new situation.

## the new situation.

- Props and shoring must be maintained until the new construction has sufficient construction has sufficient load-bearing capacity, such to be assessed by the the structural engineer and the management.
- All propping and shoring as well as the installation and removal thereof require approval of the management; propping under main supporting structures must also be must also be assessed in advance by the municipal Building and Housing nspectorate. (Bouw- en Woningtoezicht)

# 91. DERIVED MATERIALS

- Reusable, materials and historical

building materials are inspected by the management for reuse and remain the property of the client. property of the client. The rejected materials shall be disposed of



- All demolition that can be used, to be sorted at the direction of the management and stored temporarily, dry and orderly, to be adequately protected according to their nature. Rid these materials. which are to be reinstalled in the work after approval by the management or to be returned to the client, of dirt, nails, rust, mortar residue, etc.

Material to be reused:

- As defined in the specifications

### 93. DAMAGE

The contractor shall remain responsible for any damage which may arise as a result of inadequate or inefficient stamping, either to the object or to adjacent buildings, public facilities, etc.

10.00.30 TRANSFER OF INFORMATION: GENERAL

### 01. NOTIFICATION OF COMMENCEMENT

The contractor shall notify the management in good time when work is to commence and when the next operation will take place.

10.00.70 METHODS OF MEASUREMENT AND SETTLEMENT: GENERAL

#### 90. MEASURING AND SETTLEMENT METHODS

The area or length of masonry to be removed indicated on drawings and specified in the specifications shall be total or scattered. Prior to the work, the locations shall be determined in consultation with the management.

All quantities of jointing and masonry work carried out shall be measured in the work and shall be off-set against the quantities specified on drawings and in these specifications, in relation to the actual total surfaces. The unit prices submitted shall serve as the basis for settlement.

The depth of brickwork to be cut out is indicated on the basis of the size of brick used. The depth indicated is average and may be either more or less deep at the discretion of the management.

### **10.31 TOTAL DEMOLITION WORK**

## 10.31.10-a TOTAL demolition work

#### TOTAL DEMOLITION WORK

Material details: stone masonry, wooden window frames, wooden roof beams and wainscoting, bituminous roofing, concrete floor, concrete foundation strips

Harmful/contaminated materials: see asbestos inventory report

Scope of demolition work: Entirety. Take into account the left-hand side wall, which is also the plot boundary with the adjacent property, number 28. If still of sufficient stability, to be retained, otherwise to be completely demolished and (temporarily) closed opening between both properties.

Provisions to adjacent properties: take into account the separation between property 30 and 28.

Removal of exiting material

Finish demolition site: fill hole in the ground with clean sand

.01 BUILDING

Complete removal of garage on left side of property

## 10.31.10-b TOTAL demolition work

## 0. TOTAL DEMOLITION WORK

Construction data: all demolition or dismantling work follows essentially from the comparison of the "existing and to be made condition" drawings, from the specified specification descriptions for each component and/or from the finishing statements.

The space mentioned by name refers to the existing condition drawings.

Scope of demolition work: if, for proper execution, more must be demolished than described in 10.32, this is part of the contractor's work, all in consultation with the management.

Reinstall dismantled parts for reuse for repair, conservation, etc.



### .01 BUILDING

Any demolition or dismantling work.

### **10.32 LOCAL DEMOLITION WORK**

## 10.32.30-a demolition work NON-CONSTRUCTIVE SELF-STANDING PART

DEMOLITION WORK NON-CONSTRUCTIVE INDEPENDENT PART

Material data: existing pipes, lighting fixtures, CCTV installation

Scope of demolition work: complete

Provisions around: neatly sealing expired fixing points using repair mortar

Removal of outgoing material

.01 OUTSIDE WALL

Removal and disposal of all obsolete installations on the facade.

10.32.30-b demolition work NON-CONSTRUCTIVE SELF-STANDING PART

NON-DESTRUCTIVE REMOVAL PART

Material data: metal decorative bars, folding grilles and sun blinds on the outer facade

Method of removal: dismantling

Storage of outgoing material: in consultation with management, store parts for reuse or dispose of

Finishing of removal: neatly sealing expired attachment points using repair mortar

.01 OUTSIDE WALL

- The decorative trellis on the rear facade and side facade ground floor.
- The metal folding fence at the rear elevation.
- Corrugated iron ornamental fencing to the front elevation at the point of the biscuit.

## 10.32.41-a demolition PLATE/PROOFING

## DISMANTLING SHEET/PROFILE CLADDING

Buoyage section rear extension

Material data: plastic

Scope of dismantling: Complete dismantling

Material removal .01 ROOF EDGE

Removal of plastic fascia board from rear extension

10.32.42-a demolition work roof covering

REMOVAL OF SLATE COVERING

Material data: natural slates hooked and nailed.

Scope of removal:

- slate covering.
- associated leadwork.
- skylights

Provisions surrounding area: adequately protect

Storage of derived material: materials suitable for reuse

Disposal of discarded material: other materials

Finish of removal area: nailproofing and cleaning of wooden boarding.

.01 PITCHED ROOF All slate coverings.

10.32.42-b demolition work roof covering

REMOVAL OF METAL SHEET COVERING

Materials: zinc, wooden slats, insulation

Scope of removal: entire



Provisions surrounding: sufficient protection

Removal of discarded material

Finishing of removal: make roof boarding or substrate nailfree

.01 FLAT ROOF

Complete demolition of the zinc ridge roof incl. lead flashing and build-up to the existing roof boarding. .02 FLAT ROOF

The complete demolition of the zinc ridge roof incl building up to the existing roof boarding of the neighbouring house number 32. Work will be carried out simultaneously.



### **12 GROUNDWORK**

#### **12.00 GENERAL**

### 12.00.20 REQUIREMENTS AND EXECUTION: GENERAL

#### 93. WHEN EXCAVATING

Carry out excavations in such a way that sufficient working space is created. This working space shall be at least 50 cm from the outside of structures.

The slopes at the excavations should not be steeper than can be allowed in view of the composition of the soil.

## 94. ARCHAEOLOGICAL SUPERVISION

When excavating, the contractor shall take into account the occurrence of foundation remains and other construction traces of former building and wall works. This means that these remains must remain intact.

All excavations are carried out in the presence of an archaeologist. Work is carried out on his instructions.

(Remains of) utensils, building blocks, etc. found during the excavations are to be stored on the instructions of the management.

### 12.00.30 TRANSFER OF INFORMATION: GENERAL

### 01. NOTIFICATION OF COMMENCEMENT

The contractor must notify the management in good time when work is to commence and when the next treatment will take place.

# 12.50 PROCESSING OF SOIL AND SOIL REPLACEMENT MATERIALS

### 12.50.10-a PROCESSING OF SOIL, GROUNDS

0. PROCESSING OF SOIL (STABU STANDARD)

Processing of soil (STABU Standard, ch. 12).

Layer thickness (m): as encountered.

Deliver shortfall soil from outside the construction site.

Return soil types separated during excavation to their original position as far as possible.

GROUND

Soil from work site

.01 LAND

- a. Along the façade for the purpose of repairing masonry and pointing.
- b. For the purpose of repairing rainwater drains and connection to the municipal sewer.



## 14 EXTERNAL SEWERAGE AND DRAINAGE

#### **14.00 GENERAL**

### 14.00.20 REQUIREMENTS AND CONSTRUCTION: GENERAL

#### BOLTED JOINTS

At bolted joints, the shank of the bolt shall extend at least 2, but not more than 5 strakes beyond the installation part.

### 90. EXTERNAL DRAINAGE

- The outside sewerage system is to be constructed of PVC 0 125 mm as a separate system.
- The entire sewer system is to be p.v.c. 3.2mm class 41 in accordance with NEN 7045 and 7046.
- Lay the sewage pipes on a slope of approx. 10mm/m1.
- Outdoor sewers are to be laid as much as possible in the trenches excavated along facades for the purpose of repairing foundations.

trenches along facades.

- The entire sewer system should be watertight, odour-free and contaminant-free.

contaminants. Revision drawing(s) to be produced by the contractor:

The drawing(s) must show:

- the pipe route with diameters.
- the material of the pipe.
- location and type of fittings/appendages.
- location, type and capacity of manholes and separators.
- The dimensions.

The data must be recorded so that the components are hidden from view.

are hidden from view.

Drawing medium: white print/digital.

Number of copies to be provided: 2 for approval, 4 approved.

Time of delivery: 5 days before the parts are hidden from view.

hidden from view.

## 91. FREE-FALLING OUTSIDE SEWERAGE

The entire sewerage system shall be watertight, odour-free and contaminant-free. deliver.

## 14.00.40 RISK ALLOCATION AND GUARANTEES: GENERAL

## 90. PARTS TO BE GUARANTEED

A guarantee is required for the following components, which must apply from the completion of the component until the completion of the work and in

continuation thereof during the specified period.

Component: new sewers and connections to sewers.

- To be guaranteed by: the contractor.
- period: 10 years.

Component: new drainage installation.

- To be guaranteed by: the contractor.
- period: 10 years.

## 14.00.50 ASSOCIATED OBLIGATIONS: GENERAL

#### 90. MUNICIPAL SEWER CONNECTION

a. The foul water sewerage system by contractor to connect to the existing sewer connection.



b. The rainwater sewerage installation by the contractor to connect to the existing sewer connection.

### **14.33 PLASTIC PIPES**

14.33.10-a CONSTRUCTION OF PLASTIC OUTSIDE DRAINERS, PLASTIC DRAINERSHOUSE

CONSTRUCTION OF PLASTIC EXTERNAL SEWERS

Construction method:

- installation depth: same as existing
- slope shall not be opposite at any point.

Connections:

- connection point(s)
- PLASTIC SEWER PIPE

.01 FREE-FALL EXTERNAL SEWER

Connecting additional rainwater drain to be attached to rear extension.



## **15 SITE SURFACING**

## 15.21 DEMOLITION/REMOVAL OF EXISTING PAVEMENTS

### 15.21.09-a DISMANTLING PURCHASES

## REMOVAL OF PAVEMENTS

Remove concrete clinkers for jointing repair at ground level up to approximately 500 mm from the façade.

Store clinkers for reuse.

.01 PAVING

Removal of concrete clinkers left side facade for jointing repair.

## 15.27 REINSTATE EXISTING SITE PAVING

### 15.27.09-a REPLACEMENT PLACEMENT

### RELOCATING PAVEMENTS

Replace concrete clinkers after completion of grouting work. Soil must be well compacted. Replace bricks in bond as existing. .01 PAVING

Replace concrete clinkers on left side facade after jointing repair.



### 22 MASONRY WORK

#### **22.00 GENERAL**

22.00.20 REQUIREMENTS AND EXECUTION: GENERAL

### 90. EXECUTION OF MASONRY WORK

- The following execution guidelines apply to the work to be carried out:

URL 4003: historical masonry (walls and all kinds of other masonry).

URL 20-104: façade cleaning (of façades made of stony materials).

- Good stones from demolition should be reused for suitable purposes at the discretion of the management. This is subject to the condition that they are completely clean on the visible side and that there is no damage.
- When refilling existing facades, a stone type should be used that matches the stone found on site in terms of size, structure, colour and hardness. These can be either reused bricks from bricks from a second-hand building materials trade, as well as newly fired bricks, provided the above conditions are met. If re-used bricks are If bricks are to be reused, they must be completely cleaned of mortar and lime mortar and lime residue and weathering.
- Additional bricklaying of new masonry is to be carried out in pure masonry masonry bond. The joint dimensions must match the existing work. work.
- For filling in existing work, maintain the existing masonry bond. existing masonry bond.
- The necessary sawing and cutting work must be carried out to make the new masonry fit the existing masonry.

intanden of the new masonry on the existing masonry.

- Thoroughly clean all masonry surfaces to be repaired.
- Remove mortar residue at the connections of the masonry to be repaired to the existing masonry. existing masonry.
- When replacing or replacing natural stone, work on the masonry with stones that match the existing stones in shape and colour (in the case of clean work).
- For large masonry surfaces, for every 1 m2 of masonry, chisel out 2x 15 bricks halfway down an extra deep, in order to connect the masonry to be repaired to the existing masonry. to the existing masonry.
- When removing single bricks (= stretch or head) and small repairs (= 5 to 10 bricks), always drill the bricks in the heart of the brick first

before cutting out the stones.

#### 91. EXECUTION OF GROUTING

- The following implementation guidelines apply to the work to be carried out: URL 4006: historical grouting (various types of grouting on facades and other masonry).
- According to manufacturer's instructions.
- The substrate on which the mortar is applied must be  $\mbox{dry/moist.} \label{fig:equation}$

This means a moist substrate without free water on the surface of the substrate. of the substrate.

- The masonry must not be wet due to prolonged rainfall. In dry and sparse weather (low relative humidity), the masonry should be covered with damp blankets.
- Apply both the ribbon joints and the butt joints one after the other, i.e.



Between the application of the ribbon joints and butt joints of the mortar applied on the same day applied on the same day, a maximum difference in time of half a day is allowed.

22.00.40 ALLOCATION OF RISK AND GUARANTEES: GENERAL

#### 90. PARTS TO BE GUARANTEED

A guarantee shall be required for the following components, which shall apply from the completion of the component until the handover of the work and thereafter for the specified period.

Component: all work belonging to this chapter.

- to be guaranteed by: the contractor.
- guarantee period: 10 years.
- PARTS TO BE GUARANTEED

A guarantee shall be required for the following components, which shall be effective from the completion or delivery of the guaranteed component during the specified period.

Component: grouting

- to be guaranteed by: the contractor.
- period: 10 years.

### 22.00.60 BUILDING MATERIALS: GENERAL

#### 90. MASONRY MORTAR

The masonry mortar is to be prepared at work with mortar mills of a construction to be approved by the management in such a way that mixing ratios are constant and can be checked.

and can be checked.

Do not prepare mortars in larger quantities than required for immediate processing. It is forbidden to process mortar from the previous day.

## 22.14 SAMPLES, TEST FIXTURES AND TEST SURFACES

## 22.14.10-a SAMPLES MASONRYWORK

SAMPLE MASONRY WORK

Sample(s) to be provided by the contractor.

Of bricks to be completed

Assessment characteristics:

- shape: as existing
- quality: as existing, minimum R5
- colour: as existing

.01 OUTSIDE WALL

Facade brick samples to be submitted

### 22.14.30-a SAMPLES OF METSELWORK

## 0. MASONRY TEST SURFACE

Test surface(s) to be provided by the contractor.

Of: the pointing to be replaced

Number: 3

.01 OUTSIDE WALL

Tests for replacement of pointing

### 22.14.30-b TEST PLACES FOR REPLACEMENT OF SEWORK

#### MASONRY TEST SURFACE

Test surface(s) to be provided by the contractor.

From: cleaning the masonry



Number: 3

.01 OUTSIDE WALL

Tests for masonry cleaning

22.14.30-c masonry cleaning test surfaces

MASONRY TEST SURFACE

Test surface(s) to be provided by the contractor.

From: grouting Number: 1

.01 OUTSIDE WALL

Test surfaces for removing the bad parts of jointing

## 22.21 DISMANTLING/REMOVAL OF EXISTING MASONRY

## 22.21.21-a REMOVAL OF GROUNDWORK, RESTAURATION

0. RESTORATION WORK, REMOVAL OF GROUTING

Component: missing, loose and weathered grouting

Restoration category (URL 4006): 3a

Remove jointing in accordance with URL 4006 Historical Jointing, para 3.5.1 Remove deteriorated and damaged jointing.

Method of removal: entirely manual cutting of ribbon and butt joints.

Pneumatic grouting: permitted.

Joint depth (mm): Joint depth 1.5 times the thickness of the tape joint.

Rectangular joint removal: in accordance with URL 4006, Appendix 2: Normative details for restoration joints.

The masonry must have been cleaned with clean water after removing the grout.

The removed grout and dust must have been collected and disposed of as chemical waste.

.01 OUTSIDE WALL

- All poor sections of grouting on exterior walls
- repair crack in left side wall above door frame

## 22.22 CLEANING OF EXISTING MASONRY

#### 22.22.20-a CLEANING EXISTING MORTARWORK, RESTAURATION

0. RESTORATION WORK, CLEANING OF EXISTING MASONRY

Component: facade masonry

Restoration category (URL 4003): 1.

Cleaning: in accordance with a test surface to be set up in the work, to be assessed by the management.

Dimension(s) of test surface (m2): 1

Substrate

Method of cleaning: spray clean with water.

.01 OUTSIDE WALL

The brick masonry in the area of the external wall for the purpose of pointing repair

## 22.25 REPAIRING EXISTING MASONRY

# 22.25.11-a REPAIR EXISTING MORTARWORK

REPAIR EXISTING GROUTING

Component: missing, loose and weathered grouting of gallstones.



## 9. GROUT

Cementitious pointing

.01 OUTSIDE WALL

Replace loose jointing in the area of the glass bricks on the rear façade, 1st floor.

### 22.25.23-a REPAIRING EXISTING METSELWORK, BAKSTEEN METSELSTEEN, RESTAURATION

## RESTORATION WORK, REPAIRING EXISTING BRICKWORK, REPOINTING CRACKS

Component: chimneys

Restoration category (URL 4003): 2.

Masonry: non-bearing. Type of crack: transverse.

Attachment: following the bond.

Masonry brick to be used: existing brick, supplemented with new bricks of corresponding colour,

finishing rings and hardness.

Re-use of masonry brick: remove mortar residues and rinse before re-use.

### MASONRY BRICK

Colour: as existing Surface: sanded.

Dimension(s): as existing

.01 CHIMNEY

- Repair crack in high chimney at rear wall
- Repair loose stones other chimneys

### 22.25.24-a REPAIR EXISTING MOUNTING, GRAPHING REPAIR, RESTAURATION

## 0. RESTORATION WORK, REPAIR OF EXISTING BRICKWORK, MORTAR REPAIR

Component: brick masonry work Restoration category (URL 4003): 2.

Chop up substrate to stable substrate, minimum depth 3 mm, dust and moisten substrate sufficiently.

Fill raised areas with brick repair mortar.

Repair: in accordance with a test surface to be set up on site, to be assessed by the management.

Dimension(s) of test surface: 1 brick

Remove old ironwork in the facade, which causes damage to the brick

## BRICK REPAIR MORTAR

Intended use: pure mineral-bound 1-component mortar and specially developed for brick restoration.

**Product characteristics** 

Specific gravity (kg/dm�): 1.70.

Bending tensile strength (N/mm�): 2.5 - 4.5.

Dynamic E-modulus (KN/mm�): 14.0 - 20.0.

Water absorption (%): 10.

Linear expansion coefficient (%): 0.01. Hydraulic expansion coefficient (%): 0.08.

Water vapour permeability (�): 31.

.01 OUTSIDE WALL

Repair flaked bricks, scattered

Repair damage by ironwork in facade

.02 OUTSIDE WALL

Improve old repairs with cement mortar at first floor rear façade

## 22.26 ADJUSTING EXISTING MASONRY



### 22.26.21-a COPYING EXISTING MORTARWORK

## RESTORATION WORK, COPYING EXISTING POINTING

Component: missing, loose and weathered grouting

Restoration category (URL 4006): 3a.

Joint depth (mm): 1.5x depth of ribbon joint

Masonry must have been cleaned with clean water before grouting.

Joint type: clipped.

Grouting according to a test surface to be set up on site: of at least 600x600 mm, set up at least 3 test surfaces for this purpose to assess colour, structure and type of grouting.

Joints to be compacted: with a joint spike.

#### 4. GROUT

Composition in volume units: in accordance with URL 4006, historical grouting,

Table 1, Code D.

.01 OUTSIDE WALL

- All poor sections of pointing on exterior walls
- Repair of crack in left-side facade above door frame.

#### 22.26.21-b COPYING EXISTING GROUNDWORK

## RESTORATION WORK, COPYING EXISTING POINTING

Component: missing, loose and weathered grouting

Restoration category (URL 4006): 3a.

Joint depth (mm): 1.5x depth of ribbon joint

Masonry should be cleaned with clean water before grouting.

Joint type: flat, smooth.

Grouting according to a test surface to be set up on site: of at least 600x600 mm, set up at least 3 test surfaces to assess colour, structure and type of grouting.

Joints to be compacted: with a joint spike.

.01 OUTSIDE WALL

Pointing of chimneys, after restoration of brickwork.

## **22.84 MOISTURE BARRIERS**

### 22.84.10-a LODEN DAMAGE RETROACKS, BLOOD

### 0. LEAD MOISTURE BARRIER STRIP

The installation of lead roof, facade and gutter constructions shall be carried out by a company holding the KOMO process certificate in accordance with BRL 5212-2.

Strip length (mm): max 1000

Overlap (mm): 100 Fixing method:

- With lead plugs.
- Embed 50 mm into the masonry.

## LEAD

Intended use: wall lead brickwork

Model: smooth.

Nominal thickness (NEN-EN 12588) (mm): 2.00, red.

Accessories:
- patinating oil
.01 OUTSIDE WALL



Completely renew lead strips in the rear wall. .02 CHIMNEY Renew lead strips on chimneys



## **24 STRUCTURAL CARPENTRY**

#### **24.00 GENERAL**

24.00.20 REQUIREMENTS AND CONSTRUCTION: GENERAL

### 01. INSPECTION OF MACHINE CARPENTRY

At least 3 times 24 hours before machine carpentry is painted, the contractor shall request the management to inspect it (Saturdays, Sundays and public holidays not included in this). Such request shall be recorded in the weekly report and/or diary.

#### 90. SIGHTWORK

All wooden surfaces in contact with concrete and/or masonry, as well as the non-visible surfaces of all wooden parts exposed to the open air and not further treated, shall be treated twice with lead paint. The second coat of a different colour.

#### QUALITY REQUIREMENTS

The quality requirements for joinery (KVT 1980, NPR 3670) and for "KVH 1980" (NEN 5461) and the NEN sheets valid for respective types of timber apply.

Timber in accordance with quality requirements article 5.2.8. NEN 5641.

Also NEN 3180, NEN 5467 and NEN 5477.

For joinery, the quality S/14-18 mentioned in KVT 1980 applies (for windows S-169).

#### 92. WOOD PRESERVATION

Preservation according to NEN 2907 with a preservative according to NEN 3274 with a minimum incorporation by means of ironing or spraying, up to an edge penetration class E (NEN 3251).

Timber works to be treated:

- factory-made carpentry

#### 93. ANCHORS

Supply and install all anchors required for construction, such as: upwash, wall plate, hook, torque, railing, corner and strip anchors, nose irons and joist bearers, complete with fasteners required for proper structural construction, in hot-dip galvanised finish. Make timber notches 2 mm. deeper than the nose irons etc. to be inserted.

## 94. BEAM AND CAP TIMBER

The joists, purlins, cap timbers, etc. with the necessary chocks, beam pieces, ravelings, underlays, overhangs and ceiling scraps to be applied on site and according to layout and dimensions as shown on drawing.

## 24.00.29 REQUIREMENTS AND EXECUTION: RESTORATION WORKS

## MACHINING REQUIREMENTS

The parts to be renewed shall be treated in such a way that they are compatible with the original parts to be maintained.

All visible woodwork should be planed perfectly smooth by hand; machine chipping should be avoided. Untreated or transparent visible woodwork must not have pencil marks, stains or other stains. Functional counting marks applied with a chisel or gouge may be present.

## 02. CONNECTIONS

Always apply the original joining techniques present in the work, unless otherwise specified. specified. This means, among other things, that nailed joints are made with forged nails of sufficient size. Pin and hole connections should be made with oak tongued nails of overlength. Welded joints of interior and exterior joinery shall be glued with construction adhesive.

#### 03. RECOMMENDATIONS



Deliver and fit all additions to carpentry arising from the work that are not specifically mentioned but are necessary due to the nature of the work, without settlement. Check all parts of joists and roof structures for defects, wood rot and choking. If necessary, hack free and repair as directed by the management.

#### 04. CONSERVATION

For wood and stone preservations, only those products may be used, which have an approval number from the Pesticides Approval Committee and the Ministry.

Furthermore, the wood treated with preservative must be suitable for painting over with a common paint product. This is subject to the approval of the management.

In the treated rooms after completion of the preservation work an engraved plastic plate, size min. 200 x 300 mm, shall be affixed in a clearly visible place with the following notices:

- indication of work carried out
- indication of the agent used
- indication of year of execution.
- indication of company name and address.

During and until 24 hours after the treatment, the electricity in the room in question must be switched off and open flames must be avoided.

During the application of the materials and before a treated area is used again, the area must be adequately ventilated.

Thereafter for 48 hours, prolonged stay in the treated area should be avoided.

24.00.30 TRANSFER OF INFORMATION: GENERAL

### 90. RECORDING WORK

Prior to the work, the contractor shall make a survey of the work, whereby the extent of the remedial work should become clear.

### 24.00.40 RISK ALLOCATION AND GUARANTEES: GENERAL

## 01. PARTS TO BE GUARANTEED

A guarantee shall be required for the following parts, which shall be effective from the completion or delivery of the guaranteed part during the specified period.

Component: repaired woodwork based on Beta polymer chemical method (Section 24.31.11-b).

- To be guaranteed by: main contractor and performing subcontractor
- period: 10 years

Component: wood preservation (chapter 22.31.90-a)

- to be guaranteed by: main contractor and performing subcontractor
- period: 5 years

### 24.00.60 BUILDING MATERIALS: GENERAL

#### 90. TIMBER DIMENSIONS

The timber dimensions described in the specifications or drawings are permanent dimensions, i.e. after planing. Where no timber dimensions are given, parts to be renewed are counted as having the same timber dimensions as those present in the work.

## 91. INSPECTION OF WOOD

Without any exception, all timber to be supplied, whether at the timber yard or in the carpentry workshop shall be inspected on site by the management before processing takes place.

## 24.00.70 METHODS OF MEASUREMENT AND SETTLEMENT: GENERAL

### 90. MEASURING AND SETTLEMENT METHOD

The measuring and settlement method for offsettable quantities is net; i.e. the dimensions after processing are offsettable.

are offsettable. Sawn-offs are not settled.



### 24.26 ADJUSTING EXISTING STRUTURAL CARPENTRY

### 24.26.13-a COPYING FRAMEWORK CONSTRUCTION

## 0. RESTORATION WORK, COPY ROOF STRUCTURE

Component: gutter constructions and fascia boards.

Restoration category (URL 3001): 3a. Copying: equal to existing parts

Scope of copying: copy roof structure, in accordance with URL 3001 Historic Timber Structures, 3.6.1

General and 3.6.3 Joists - trusses - structural floors - walls.

Timber species: in accordance with existing.

Dimension(s)/measurement: in accordance with existing.

Profiling: corresponding to existing. Detailing: according to existing. Anchoring: corresponding to existing.

SAWN WOOD

Wood type: European pine.

Quality (class): B.

Thickness (mm): as existing Width (mm): as existing

Accessories: - fastener(s)

2. SAWN WOOD

.01 ROOF GUTTER

Repair poor sections of gutter panelling and complete missing sections

.02 ROOF OVERHANG

Repair poor sections of ornamental joinery and complete missing sections

.03 CONSOLE

Repair poor flashing/consoles

## 24.26.13-b BUILDING CAP CONSTRUCTION

## RESTORATION WORK, COPY ROOF CONSTRUCTION

Component: rafters, rooster timbers and makelaars.

Restoration category (URL 3001): 3a.

Copying: equal to existing parts

Scope copy: copy roof structure, in accordance with URL 3001 Historic Timber Structures, 3.6.1 General

and 3.6.3 Joists - trusses - structural floors - walls.

Description copy: replacing parts of beams affected by wood rot, as a result of leaks from roofs.

Timber species: in accordance with existing.

Dimension(s)/dimensions: in accordance with existing.

Profiling: in accordance with existing.

Detailing: as per existing.

Nails: reuse existing forged nails, if any.

Surface treatment anchoring: blasting, kicking, priming and painting, dry film thickness minimum 220 µm.

1. SAWN WOOD

Timber species: equal to existing or Oregon pine (NEN5470:2007)

Quality (class): B.

Thickness (mm): as existing



Width (mm): as existing Processing: planed.

Accessories: - fastener(s)

2. SAWN TIMBER

.01 PITCHED ROOF

Replacement of bad and degraded parts of the ridge beam

.02 PITCHED ROOF

Replacing poor and degraded parts of the rafters

.03 ROOF BEAM, FLAT ROOF

Replacing poor and deteriorated parts of roof beam flat roof, under zinc ridge roof

### 24.26.14-a COPYING UNDERCONSTRUCTION ROOFING

RESTORATION WORK, COPYING SUBSTRUCTURE ROOFING/ROOF SHEATHING

Component: deteriorated roof covering or roof covering around deteriorated roof structure

Restoration category (URL 3001): 3a.

Copying: in accordance with the standards laid down as a reference.

Scope of copying: partial renewal of the substructure.

Timber species: in accordance with existing. Cutting method: in accordance with existing.

Dimension(s)/dimensions: in accordance with existing.

Profiling: planed, tongue and groove.

Detailing: as per existing.

Direction of roof boarding: horizontal.

2. SAWN TIMBER

Intended use: roof boarding Timber species: European pine.

Quality (class): B.

Thickness (mm): as existing

Processing: planed.

Accessories:

- fastener(s).

.01 PITCHED ROOF

Replacement of the roof boarding at repairs to the ridge and roof structure

.02 FLAT ROOF

Replacement of poor sections of flat roof boarding

.03 FLAT ROOF

To be calculated on the total replacement of the roof boarding of the flat roof of the raised extension.

# **24.31 BEAM STRUCTURES**

## 24.31.11-a TIMMERWORK, BALCLAWS/PLAFOND-HANGERS, Sawn Timber

## CARPENTRY BEAMS

Distance between joists (centre-to-centre) (m): place between existing joists centre-to-centre approx. 35 cm

Slope: follow existing

1. SAWN EUROPEAN SOFTWOOD (NEN 5466:2010)

Intended use: roof beams

Quality class: B



Thickness (mm): 200 Width (mm): 300

Length (mm): approx. 4700 (equal to existing)

Processing: planed.

Accessories:
- fastener(s).
.01 FLAT ROOF

Erection of additional beams for balcony to be raised at rear elevation

## **24.44 PROFILE STRIP COVERINGS**

24.44.11-a PROFILE STRIKE CLADING, PROFILED WOOD

O. PROFILE STRIP CLADDING Substructure: ventilation facilities. Buoyage parts rear extension

SECTIONS WITH TONGUE AND GROOVE

Wood type: European pine.

Quality class: B Width (mm): 250 Accessories: - fastener(s) .01 ROOF EDGE

Attaching roof edge to rear extension



## 30 FRAMES, WINDOWS AND DOORS

#### **30.00 GENERAL**

30.00.20 REQUIREMENTS AND CONSTRUCTION: GENERAL

90. REGULATIONS AND GUIDELINES

The following regulations and guidelines apply:

- URL 4001: historic joinery (ge'lieltimmerwerk e.g. window frames, finish carpentry and stairs).
- "Quality requirements and advice for metal windows, doors and facades", compiled and published by the Association of Metal Window Manufacturers (VMR).
- "Quality descriptions for paints and related products" and "Inspection methods for paints and related products", published by the Centre for Research and Technical Advice (COT).
- Building Research Foundation report B23-2.
- Supply wooden window frames under KOMO attest-with-product certificate.
- 92. CONSERVATION

All timber surfaces in contact with concrete, masonry and/or plaster should be coated twice with lead amalgam. The second layer of another colour.

Coat all steel surfaces in contact with concrete, masonry and/or plaster once with an anti-corrosion primer.

Protect changes made after galvanisation with zinc dust compound against corrosion.

- 93. GENERAL CONDITIONS FOR HINGES AND LOCKS
- The quality and appearance of the hinges and locks to be applied shall be subject to the approval of the management.
- Hinges and locks shall be made of stainless metal (brass or stainless steel) or of hot-dip galvanised steel; fasteners shall be of a corresponding quality quality and in accordance with the parts to be fixed.
- Under galvanised' where not otherwise indicated means:
   sherard galvanising up to a layer thickness of 20 mu, to be determined in accordance with NEN 4253; hot-dip galvanising refers to hot-dip galvanising in accordance with NEN1275.
- All hinges and locks for the outer frames must comply with SKG\*\*, with the exception of historical hinges and locks.
- Building hardware (BRL 3104+w97): class 2, section 2.25 of the Building Decree, to be supplied under KOMO product certificate.

## 94. TEMPORARY FENCING C.Q. PROTECTION

During construction work, temporary screens and/or protections (such as Styrofoam underlayment floor floor protection, stucco floor protection, hardboard protection underlayment shielding, dust baffle walls, containment walls, temporary slab sealing face openings etc.) according to paragraph 05.32.

## 30.00.29 REQUIREMENTS AND PERFORMANCE: RESTORATION WORKS

## 01. MACHINING REQUIREMENTS

The parts to be renewed shall be processed in such a way as to ensure connection with the original parts to be maintained.

All visible woodwork must be planed perfectly smooth by hand; machine chipping must be avoided.



Untreated or transparent visible woodwork must not have pencil marks, stains or other stains. Functional counting marks applied with a chisel or gouge may be present.

#### 02. CONNECTIONS

Always apply the original joining techniques present in the work, unless otherwise specified. specified. This means, among other things, that all joints are raised with wooden pegs.

Use oak pegs for pin and hole connections. Welded joints of interior and exterior joinery shall be glued with construction adhesive.

### 03. RECOMMENDATIONS

All additions to joinery arising from the work, which are not specifically mentioned but are necessary due to the nature of the work, are to be supplied and installed without settlement. Check all parts of frames, windows, doors and shutters for defects, wood rot and choking.

### 09. HISTORICAL HARDWARE

Alie existing historical hardware of (parts of) frames, windows, doors and shutters to be demolished. frames, windows, doors and shutters and present them to the management for for approval for reuse.

### 30.00.60 BUILDING MATERIALS: GENERAL

#### 90. TIMBER DIMENSIONS

The timber dimensions specified in the specifications or drawings are permanent dimensions, i.e. after planing. Where no timber dimensions are given, parts to be renewed are expected to obtain the same timber dimensions as those present in the work.

#### 91. INSPECTION OF WOOD

Without exception, all timber to be supplied either at the timber yard or in the joinery workshop shall be inspected on site by the management before processing takes place.

## 30.25 REPAIRING EXISTING FRAMES, WINDOWS AND DOORS

#### 30.25.11-a REPAIR OF WOODEN FRAMES

## O. RESTORATION WORK, REPAIR OF WOODEN WINDOW FRAMES

Component: wooden window frames

Restoration category (URL 3001): 2.

Timber species (URL 4001, table 1): same as existing, pine or Oregon pine clear and better.

Copy missing profiles from existing work. Repair old attachments of the lattices with repair care.

Reposition and secure existing fall-through protection.

Size(s)/ dimensions: according to existing work.

Profiling: according to existing. Detailing: according to existing.

Anchoring: maintain existing anchoring.

Apply draught strips VR at the sliding windows.

Apply draught strips on the inside of the windows in the area of the turning windows.

.01 OUTSIDE FRAME/FACADE

Repair existing façade frames, as indicated in the appendix

.02 EXTERIOR WINDOW

Repair existing windows, as shown in the annex

### 30.26 ADJUST EXISTING FRAMES, WINDOWS AND DOORS

### 30.26.11-a COPYRIGHT SINGLE PART

0. RESTORATION WORK, COPYING WOODEN WINDOW FRAME PART



Component: components frames and windows

Restoration category (URL 3001): 3a.

Copy: equal to existing dimensions and profiling

Timber species (URL 4001, table 1): equal to contracted, or Oregon pine, clear and better

(NEN5470:2007)

Dimension(s)/dimensions: same as existing.

Profiling: according to existing.

Detailing: corresponding to existing.

Hinges and locks: remove, derust, treat with rustproofing and reinstall.

WOODEN FRAMEWORK

.01 EXTERIOR WINDOW FRAME/FRONTAGE

Replacement of lower sills and lower styles of window frames, as indicated in the appendix

.02 EXTERIOR WINDOW

- Replacement of windows, as indicated in the attachment
- Replacement of window sills, as indicated in the annex

.03 EXTERIOR FRAME/FRONTAGE

Replacement of poor parts of the frame frontage in the area of the front bay window, as shown in the annex

#### 30.26.62-a REPLACEMENT of windows

RESTORATION WORK, IMPROVING WOODEN WINDOWS

Component: wooden windows Restoration category (URL 4001): 3c.

Improvement: adapt groove for fitting insulating monument glass

Size(s)/ dimensions: according to existing.

Profiling: corresponding to existing. Detailing: according to existing.

Rebate: apply primer

1. WOODEN WINDOW

.01 EXTERIOR WINDOW

Alteration of all exterior windows for the purpose of installing insulating monument glass, as shown on the detail in the annex.

#### **30.41 ROOF WINDOWS**

30.41.10-a wooden roof window

VELUX GGL ROCKER WINDOW, ROOF WINDOW, WOOD (NEN-EN 14351-1:2006+A2:2016)

Manufacturer: VELUX Nederland BV

Type: GGL tuimelvenster, roof window, wood

Intended use: wooden frame, with pivoting window, and provisions for installation in roof finishing, roof pitch between 15° and 90°.

Height (mm): 980 (--04).

Burglar resistance (NEN-EN 1627) (resistance class): 2.

Glass package: double, 2 x 3 mm laminated glass with low ε coating, 15 mm cavity, argon gas filling, 4

mm toughened glass (--70). Width (mm): 660 (FK--).

Timber (type): pine, alternately laminated.

Interior finish: lacquered. Operation: manual.



### .01 PITCHED ROOF WINDOW

Replace roof windows on left side wall, assuming 2 pcs.

### **30.43 ROOFLIGHTS AND SKYLIGHTS**

30.43.10-a Skylight cowl

0. PLASTIC SKYLIGHT (NEN-EN 1873:2005)

Supply plastic skylights under KOMO attest-with-product certificate in accordance with BRL 0105.

Replacing existing skylights

Dome: double-walled. Outer shell: clear.

Dome shape: slightly curved, rectangular base.

Dome material: polycarbonate.

Fixation method dome: burglar-proof.

Accessories:

- interior trim
- sealing material
- fastener(s)

.01 SKYLIGHT, FLAT ROOF

Replace skylight in rear extension, size approx. 0.60x0.90m

.02 SKYLIGHT, FLAT ROOF

Replace skylight in rear extension, size approx. 1,5x2m

### 30.43.20-a ROOF Skylight ELEMENT

#### SKYLIGHT ELEMENT

Existing skylights, wooden structure with zinc covers.

Repair wooden roof structure and replace zinc cladding and covers

Renew wire glass, see H34 Dimension(s): as existing

Accessories:

- fastener(s)
- Sealing/connection device(s)

.01 SKYLIGHT, FLAT ROOF

Repair of existing skylights in front of zinc ridge roof, 2 units

30.88 APPURTENANCES

30.88.10-a APPEARS

STEL POST

repair and adjustment of all hinges and locks:

- hinges, hinges.
- locks.
- window pins.
- window handles.
- hardware.
- espagnolette.
- other.

### .01 FILLING WALL OPENING, EXTERIOR

For the purchase and/or repair of hardware for the exterior windows/doors/shutters, include a net estimate in the contract price of  $\diamondsuit$  5,000.00.



### **32 STAIRS AND RAILINGS**

#### **32.25 REPAIRING EXISTING STAIRS AND RAILINGS**

32.25.21-a REPAIRING STEP AND BALUSTRADE, RESTAURATION, WOOD

0. RESTORATION WORK, REPAIR WOODEN STAIRCASE AND BALUSTRADE

Component: repair balcony railings Restoration category (URL 4001): 2. Type of timber: as existing or Iroko Dimension(s)/measurement: as existing.

Profiling: as existing. Detailing: as existing.

Connection(s): to be checked

SAWN WOOD

Wood type: European pine.

Quality (class): B.

Thickness (mm): as existing Width (mm): as existing Surface treatment: primed

Finish: painted Accessories: - fastener(s)

.01 BALCONY RAILING

Repair balcony railings left side elevation and front elevation second floor, as shown in the annex.

## **32.51 BALUSTRADES**

#### 32.51.12-a WOOD BALUSTRADE

## 0. WOODEN BALUSTRADE

Intended use: balcony railings around balconies to be newly built

Height of balustrade in relation to floor (mm): 1000 (in accordance with the Buildings Decree)

Dimensions: see balcony fencing neighbouring property number 32

Wood: Iroko Finish: painted Colour: n.a.

Post(s): wood, horizontal openings no larger than 100 mm

Accessories: - fastener(s)

Fastening on wooden substrate, gaps properly sealed with bitumen

.01 BALUSTRADE

Attaching new balcony railing to rear extension.



## 33 ROOF COVERINGS

#### **33.00 GENERAL**

#### 33.00.20 REQUIREMENTS AND PERFORMANCE: GENERAL

#### 91. INCLEMENT WEATHER

Work shall not be started in adverse weather conditions, or the threat thereof.

Measures shall be taken to protect structures and materials in the event of sudden incidence of adverse weather conditions.

#### 92. WATERPROOFING

Construct the structure in such a way that a guaranteed durable and watertight construction is ensured.

### 93. FLATNESS OF SUPPORT CONSTRUCTION

Finish the support construction so that no damage or defects can occur to the roof linings. The support construction to be perfectly flat and free from protruding unevenness in the form of nails brackets, etc.

### 94. EMERGENCY PROVISIONS

During construction, make emergency arrangements by means of an emergency roof covering in places where the final covering cannot yet be applied for restoration purposes.

Repair leaks caused by the restoration without delay on the instructions of the management.

#### 95. FIRE SAFETY

The use of open-flame tools such as burners, grinding tools, etc. is strictly forbidden.

## 96. SHAFT

Flat roofs shall have a happy slope to the rainwater drains of at least 16:1,000.

#### 97. GENERAL

- The following implementation guidelines apply for the work to be carried out apply
- URL 4010: Historic pipework.
- Slate work is to be carried out by a recognised and skilled slate layer, this means with the requirements set for restoration work.
- The inspection costs of samples to be taken by the management from a batch of slates supplied will be borne by the

## contractor.

- Supplied slates must be carefully unloaded and stored on a flat surface.
- The slates shall be in a rectangular shape in the required format with rough edges have been cut, in a splitting thickness in accordance with the appropriate of the species and type of slate described.
- The slates to be hooked with blackened stainless steel slate hooks and/or copper slate nails. The slate hooks must be externally 10 mm larger than the specified enclosure. The thickness must be at least 2.8 mm for small format slates and 3 mm for larger formats. and 3 mm for larger formats. The hook, in which the slate rests, must curved in such a way that the slate clamps, while the nail part must be pointed downwards.
- The slate nails should be of red copper fitted with a flat head and a double-jawed stem of at least 35 mm with a thickness of 2.8 mm.
- This project is located in Wind Area II. For the minimum overlap of the slates in height is applicable Table 3 Mesh coverage for hooked execution in accordance with the IKOB-BKB implementation guidelines for roofing structures with natural stone slates.



- During on-site processing, all slates must be sorted by sound, size and thickness. Should the contractor be in default, the management may have them re-sorted at its own expense. Any rejected slates slates must be removed from the work by the contractor at the first request of the management. work.
- With a view to the proper distribution of the weight of the slate covering, account must be taken during during processing, account must be taken of the application of the heaviest slates on the lower part and with a gradual transition to the thinnest on the upper part of the roof surface. In order to avoid significant avoid significant unevenness in thickness, all slates should be transported before they are be transported upwards in corresponding thickness dimensions. sorted.
- So-called "gaps" on a roof surface as a consequence of thickness differences between the different slates may not occur. The fastening of the slates must be fastened with 2 of the aforementioned slate nails or or one hook per slate. On the roof surfaces of the spires, the slates should be fixed every 3 layers using 2 copper nails per slate.
- Chop the corner throat slates from whole slates. These may not be narrower at the base than be narrower than 2/3 of the slate width.
- At the end of slates below the ridge, end the slates with a full slate on which a chopped slate is laid. (slate length minus mesh length). Ridge lead etc.

at least 120 mm over the last slate.

- Incorporate in the slate work the lead work required as described in the leadworks of the specifications.

33.00.32 TRANSFER OF INFORMATION: SAMPLES

02. SAMPLE FOR ASSESSMENT

Before the following building materials are ordered by the contractor, submit a sample thereof to the management for assessment:

- natural slates (10 pieces of each type)
- slate hook.

## 33.00.40 ALLOCATION OF RISKS AND GUARANTEES: GENERAL

## 01. PARTS TO BE GUARANTEED

A guarantee shall be required for the following components, which shall apply from the completion of the component until the completion of the work and thereafter for the period specified. Component:

- a. Watertightness slate covering incl. lead connections.
- To be guaranteed by:
  - a. Main contractor and slater company.
- period: 10 years

## 33.26 ADJUSTING EXISTING ROOFING

### 33.26.50-a COPYING slate covering, natural slate

0. RESTORATION WORK, COPYING HISTORIC SLATE COVERING

Component: all sloping roofs covered with natural stone slate

Restoration category (URL 4010): 3a.

Renewal of the existing slate covering, retaining as much of the existing slates as possible and using new, matching slates in colour and size.



Pattern: Maas covering. Cover method: double cover.

Minimum overlap: in accordance with URL 4010.

For kills, ladder and climbing hooks, do not apply start and/or end gaps.

Fastening: with corrosion-resistant steel slate hooks. Size(s) of leathooks: in accordance with URL 4010.

Number of slate hooks (pcs): in accordance with URL 4010.

Spare slates: for Maas cover, 50 pcs.

NATURAL STONE SLATE (NEN-EN 12326-1:2014)

Supplier: Slate import b.v. in Maasbracht

Type: same as existing, in consultation with management and competent authority

Intended use: roof finishing.

Length (NEN-EN 12326-2) (mm): as existing Width (NEN-EN 12326-2) (mm): as existing Tolerance on length and width (mm): +/-5.

Tolerance on squareness (NEN-EN 12362-2) (mm): +/-5.

Straightness tolerance (NEN-EN 12362-2) (mm/500 mm): +/-5.

Colour: as existing Version: rectangular.

PARTS TO BE INCLUDED

All lead work required for a watertight finish of the slated roof surfaces among themselves and in connection with adjacent structures.

Strip length (mm): max 1000

Overlap:

- at least 100 mm. and a one-sided standing seam.
- Locks at least 60 mm.

Lead sheet coverings are to be carried out with raised edges, felses, cleats, etc. according to the nature of the work, on the instructions of the management and any detailed drawings to be provided.

Work and process the leadwork in such a way that soldered joints are unnecessary. All joints, both horizontal and vertical, to be flanged.

Apply lead sheet coverings in such a way that expansion and contraction can take place freely. Apply joints from west to east (away from the wind).

Fixing method:

- stainless steel nails fitted with a serrated shank h.o.h. 75 mm. and/or clamping between wooden structural members.

Nailing of lead should be kept to a minimum.

Fasteners such as nails, screws, etc. for lead cladding must be able to be fastened at least 25 mm deep in nailable and nail-bearing substrate.

Fasten lead in copper, 0.7 mm and 80 mm wide.

Secure wall lead with lead plugs.

Treat lead with paraffin oil.

To cover nailed joints, use proud lead plates with company name and current date.

Lead weight:

chimney lead: NHL 25
braid lead: NHL 12
plumb: NHL 25
long lead: NHL 30
ridge lead: NHL 30
cover plates: NHL 20



- wall plumb : NHL 25- (corner) ledge : NHL 35.01 PITCHED ROOF

All stone slated roofs and associated lead connections.

#### 33.31 PRE-TREATMENT SUBSTRATE, ORBITAL ROOF COVERINGS

## 33.31.20-a APPROVAL/DAMPREMING LAYER

VAPOUR CONTROL LAYER ROOF COVERING

Loosely laid, overlap (mm): along 100, across 100.

For upstands at least 50 mm above the insulation.

set up.

POLYESTER REINFORCED ROOFING MEMBRANE (NEN-EN 13707:2004+A2:2009)

Supply reinforced bituminous roofing membranes under KOMO attest-with-product certificate in accordance with BRL 1511-2.

Material: polysetermat reinforced roofing membrane.

Backing material: polyester/glass fibre + reinforcement wires

Underside finishing: oxidised bitumen with PE foil. Upper surface finish: oxidised bitumen with sand.

Dimensions (wxl) (mm): 1000 x 7500.

Nominal thickness (NEN-EN 1849-1) (mm): 3.0.

.01 FLAT ROOF

The vapour control layer on the flat roof of the raised extension near the rear wall.

## 33.32 INSULATION/DRAINAGE LAYER

## 33.32.13-a ISOLATIONWORK, ISOLATION PLATES, CELLULAR GLASS PLATE

0. INSULATION WORK, INSULATION BOARDS

Fixing method: fully bonded.

INSULATION BOARD CELLULAR GLASS (CG) (NEN-EN 13167:2012+A1:2015)

Intended use: insulation under zinc ridge roof

Coefficient of thermal conductivity ( $\lambda$ ) (W/(m.K)): < 0.05

Board thickness (NEN-EN 823) (mm): 50

Fire behaviour (NEN-EN 13501-1:2019) (class): Euro class A1

Edges: straight. .01 FLAT ROOF

Zinc corrugated roof

.02 FLAT ROOF

The zinc ridge roof of neighbouring property number 32, list these costs separately in the budget. Work to be carried out simultaneously.

## 33.32.14-d ISOLATION FRAMEWORK, ISOLATION PLATES, HARD COVERED PLATE

PROCESSING ROOF INSULATION BOARDS

Fixing method: loosely laid.

Half-brick pattern.

Slope in the substructure (minimum 16 mm/m').

- Lay the boards tightly together and connect well in the bilges.
- PIR FOAM BOARD (NEN-EN 13165:2012+A2:2016)

Coefficient of thermal conductivity ( $\lambda$ ) (W/(m.K)): .....



Nominal sheet thickness (dN) (NEN-EN 823) (mm): .....

Material (NEN-EN 13165:2012+A2:2016): PIR, hard Polyisocyanurate.

Edges: rebate.

Coating alu-multilayer complex.

N.B.:

This building material can be supplied with a KOMO quality declaration.

.01 FLAT ROOF

Insulation on the flat roof of the raised extension near the rear façade.

### **33.33 BITUMINOUS ROOF COVERINGS**

33.33.11-b BITUMINIC ROOF COVERING SYSTEM, FLAT

BITUMINOUS ROOFING SYSTEM, LOOSE LAID

Substrate: Wood.

Roofing system: multilayer. Climate class: Climate class II.

Underlayment:

- Loose-laid.
- Longitudinal overlap (mm): 70.
- Transverse overlap (mm): 100.

Top layer:

- fully bonded.
- longitudinal overlap (mm): 70.
- Transverse overlap (mm): 100.

Ballast layer: Gravel/tile combination.

Closed roofing systems must have been installed by a roofing company that holds the KOMO process certificate in accordance with BRL 4702-02, taking into account NEN 6050-09.

6. APP ROOF PANEL

Material:

- with polyester/glass membrane + reinforcement threads. APP modified bitumen,

underside clean insert

Dimensions (wxl) (mm): 1000 x 15000

Thickness (mm): 1.9.

NOTE:

This building material can be supplied with a KOMO quality declaration.

7. APP ROOF PANEL

Material:

- with polyester-glass combination APP modified bitumen,

underside fitted with groove technology and at least 15% recycled material

Size(s): 1000 x 6000. Thickness (mm): 3.8.

NOTE:

This building material can be supplied with a KOMO quality declaration.

.01 FLAT ROOF

The roof covering on the flat roof of the raised extension at the rear façade.

### 33.38 PARTS TO BE INCLUDED, ORBITAL ROOF COVERINGS

33.38.21-a BALLAST/ROOFING, CONSTANT TILE



## 0. BALLAST/ROOFING, TILES

Tile weight (kg/m²): determined on the basis of the wind load to be taken into wind load in accordance with

NEN-EN 1990 and 1991 as well as NPR 6708.

The calculation must be submitted to the management.

1. CONCRETE TILE (NEN-EN 1339:2003+C1:2006)

Type: balcony tiles with sufficient drainage possibilities

Length (mm): 600 Width (mm): 600 Thickness (mm): 45 .01 FLAT ROOF

Ballast layer on the flat roof of the raised extension near the rear façade

### 33.61 STANDING SEAM SYSTEMS

### 33.61.12-a METAL FELSPLAAT COVERING, FLAT ZINC PLATE

METAL STANDING SEAM CLADDING

Sealed with all-round lead strip as edge trim

Replacing the zinc sheet

FLAT ZINC SHEET

Zinc type and quality (NEN-EN 1179): titanium zinc, Z1.

Design: plate.

Nominal thickness (d) (mm): 1.00.

.01 FLAT ROOF

Replace zinc cladding balcony second floor front facade.

## **33.62 ROLL COVERINGS**

## 33.62.11-a METAL ROOF COVERING, FLAT ZINC PLATE

## METAL RIDGE COVERING

Fixed with clips

Claw spacing (mm): as existing

Expansion joints must be fitted every (max) 10 metres

Bottom edge: drip-piece

Allow for fire spread between the roof of numbers 30 and 32.

NEDZINK ZINC ROOFING SHEETS

Manufacturer: NedZink BV. Intended use: roofing.

intended use. roomig.

Essential characteristics in accordance with EN 14783:2013:

Coefficient of thermal expansion (1/K):  $22 \times 10^{-6} \text{ K}^{-1}$ .

Fire behaviour (NEN-EN 13501-1:2019) (class): A1.

Durability: Zn.

Nominal thickness (NEN-EN 501) (mm): 1.00.

Panel length (NEN-EN 501) (mm): equal to existing panels (max 890mm).

Profile height (NEN-EN 501) (mm): 55.

Zinc type and quality (NEN-EN 988): zinc-copper-titanium alloy Zn-Cu-Ti.

External surface finish (NEN-EN 501): mill-finished NedZink NTZ.

Components:

Ruff caps (wxh) (mm): width 40-50 x height 60mm



Fixed and sliding clips Protective foil .01 FLAT ROOF The zinc ridge roof .02 FLAT ROOF

The zinc ridge roof of neighbouring property number 32, list these costs separately in the budget. Work will be carried out simultaneously.



## **34 GLAZING**

#### **34.00 GENERAL**

## 34.00.20 REQUIREMENTS AND CONSTRUCTION: GENERAL

## 90. GENERAL CONDITIONS OF EXECUTION

- The following execution guidelines shall apply to the work to be carried out applicable:
- URL 4002: stained glass panels (glass panels, advice and realisation).
- It is strictly forbidden to inscribe the panes with soap or chalk.
- If, during the construction work, lime or specie residue lands on the glass should be removed properly immediately.
- If any damage occurs as a result of the actions described under a. and b.
- a. and b., these are for the contractor's account.

#### 91. PAINTING

- All new wooden parts must be primed to 80 mu.
- All other painting work according to section 46.

#### 92. GLASS IN LEAD

- Stained glass panels to be carefully dismantled in case of loss.
- Damage caused by careless dismantling is for the contractor's account. contractor's expense.
- Dispose of broken stained glass panes only with the management's permission.
- All stained glass panels to be removed or all stained glass windows to be reused must be cleaned. windows to be cleaned.

#### 93. GLAZIER

- The glazier is obliged, according to the guidelines of the Glazier's Code (OVG) and the guidelines of the Corpus Vitrearum to carry out the work.
- The glazier must be V.C.A. certified.
- The glazier is not permitted to subcontract (parts of) the work without the written permission of the client and/or management.

### 34.00.40 ALLOCATION OF RISKS AND GUARANTEES: GENERAL

## 01. PARTS TO BE GUARANTEED

A guarantee is required for the following components, which must apply from the completion of the component until the handover of the work and subsequently for the period stated.

Component: glazing and glazing sealant

- to be guaranteed by: the contractor.
- period: the contractor guarantees the supply and installation of the glazing systems for a period of 10 years, on the understanding that, in respect of repair costs, the contractor shall bear the following:
  - a. Within five years of delivery 100
  - b. In the sixth year after delivery 85 %.
  - c. In the seventh year after completion 65 %
  - d. In the eighth year after completion 50 %
  - e. In the ninth year after completion 30 %
  - f. In the tenth year after completion 15 %.

Record the guarantees in a declaration of guarantee in accordance with the model set out in clause 01.02.22.

### 34.25 REPAIRING EXISTING GLAZING



## 34.25.34-a REPAIRING GLASS-IN-LEAD PANELS, PLASTIC REPAIR, RESTAURATION

D. RESTORATION WORK, REPAIRING GLASS

Component: checking and repairing lead netting and sealant

Restoration category (URL 4002): 2.

Glazing type: antique.

Performance: in accordance with a test surface to be set up, to be assessed by the management.

.01 OUTSIDE WINDOW

Restore 2 stained glass panels at bay front facade

34.26 ADJUSTING EXISTING GLAZING 34.26.30-a UPDATE EXISTING glazing

IMPROVE EXISTING GLAZING

Replace existing wire glass in location of the light covers on the flat zinc ridge roof for fall-through and solar control glazing.

Glazing must comply with NEN3569.

.01 BARREL VAULT, FLAT ROOF

Replace the wire glass of the skylights on the flat zinc ridge roof, 2 pcs.

#### 34.33 MULTI-LAYERED INSULATING GLASS

## 34.33.10-a MULTIBLAD ISOLERATING GLASS, BEGLAZING WITH KIT AND GLASS LATES

O. MULTILAMINATED INSULATING GLASS (NEN-EN 1279-5:2018)

Type: Flat glass with a modern appearance

Intended use: Energy-saving glazing

Heat transfer coefficient (U) (NEN-EN 673) (W/(m<sup>2</sup>.K)): 2

Edge connection (type): Hot melt butyl sealant, double barrier, desiccant incorporated into

aluminium spacer. Equipped with a lowered edge seal of approximately 10mm.

Thickness outer pane (mm): 3

Cavity width (mm): 6.

Cavity gas filling (type): argon.
Thickness inner pane (mm): 3
1. GLAZING WITH SEALANT

Glazing system: from the outside

.01 OUTSIDE WINDOW

Replacement of all single glazing in rear extension

#### **34.38 MONUMENT GLASS**

34.38.20-a MONUMENT GLASS, glazing with sealant and glazing slats

O. MONUMENT GLASS (NEN-EN 572-9:2004)

Type: multi-layered extra-thin historical insulating glass

Intended use: energy-saving glazing

Appearance: replication of historical glass with wavy distortion

Thermal transmittance (U) (NEN-EN 673) (W/(m<sup>2</sup>.K)): 2

Light transmission (TV) (NEN-EN 410) (%): 82

Thickness (mm): 12. Glass colour: clear.

GLAZING WITH SEALANT AND GLAZING BEADS

Glazing system: from the outside.



Glazed with (NPR 3577): elastic sealant, backfilling material and glazing battens. Support, adjusting and glazing batten blocks: glued into the rebate. .01 OUTSIDE WINDOW

Replace all single glazing for monument glass, with the exception of glazing in the extension rear.



### 35 NATURAL AND ARTIFICIAL STONE

#### **35.00 GENERAL**

35.00.20 REQUIREMENTS AND EXECUTION: GENERAL

#### 90. STELWORK

Moulds, wedges (without knots), etc. required for execution shall be made by the contractor. The natural stone to be set on spruce wedges and never on a hard and/or colouring type of wood.

Damage to existing natural stone parts caused by improper

careless dismantling is at the contractor's expense.

#### 91. INSPECTION AND QUALITY

Inspection takes place on colour and quality in the contractor's workshop. contractor's stonemason.

Natural stone shall meet the following requirements:

- be free from defects which, over time, may impair the durability of the stone.
- be stripped of all stone crusts or earth, scaled down to the healthy stone and be perfectly clean.
- be free of impurities (such as grease, oil, rust, etc.).
- The management does not accept repairs to newly supplied stone. Inf irregularities on the surface of the stone become apparent during production come to light during production, the stone must be taken out of production.
- Gluing of natural stone parts is in principle not permitted. Only in exceptional exceptional cases can, after consultation with the advisor of the Rijksdienst for Cultural Heritage and the management, the gluing of natural stone parts components may be permitted.

If the management agrees to the gluing of a component,

the stonemason must indicate how and with what make the gluing is done.

takes place. For the gluing of natural stone components, only Epoxy glue (Akapox o.g.) is permitted. The stonemason provides the

the management a technical specification of the type of glue to be applied.

- The sanded or honed surface of the natural stone components must be not be scratched and or turned by a mechanical sanding disc or sanding stone.

## 92. PROCESSING NATURAL STONE

- When processing the natural stone, the stonemason should take into account account of the groove laying of the stone and the place where the stone will be applied in the If there is doubt about the location or if a block is to be

block is to be placed according to the wrong army (e.g. at corners

of water borders) this is only permitted after approval by the management.

- Measurements or measurements required for the installation work, are provided to the stonemason by the contractor.
- If the weather is dry or poor, the contractor will ensure that the mortar does not dry out too quickly. dry, by regularly moistening the masonry.

dry or sparse weather persists for a longer period, the recently applied masonry should be covered with moist burlap bags or after moisten, cover with plastic film.

- At temperatures below 5 ◆C and at night frost, the masonry should be covered by



masonry must be covered by the contractor in a frost-free manner.

- The bricks are laid on good quality wedges or plastic

fitting plates at least 50 mm from the corners (to avoid edge damage), which are matched to the brickwork.

(to prevent edge damage), which are matched to the joint width taking into account the tolerances, so that the top section of each layer is in line.

- The butt joints must be properly cemented after setting the block be cemented.
- Gluing of anchors should only be done with an Akapox brand epoxy adhesive.
- If natural stone elements need to be worked on or touched up on site, the provisions of the or updated on site, the provisions of the Working Conditions Act must be observed. be observed.
- Surface of mortar repairs and inserted blocks to be provided with a surface finish in accordance with existing work.
- The casting in of blocks of natural stone or the replacement of blocks of natural stone also includes agreeing the connections to the existing work.

### 93. TRANSPORT AND STORAGE

- Delivery of the new stonework to the building site.
- The natural stone elements should be carefully packed to avoid breakage and damage.
- The risk of transport is for the contractor.
- Delivery and processing of natural stone components including the transport and transport and tools required.

#### 94. QUALITY REQUIREMENTS

The subcontractor of the natural stone work must be a member of the Restoration Stonemasons, and thus be in possession of the accompanying ERS-certificate (the certificate following verification according to the the "Erkenningsregeling Restauratie Steenhouwerijen").

An alternative subcontractor not in possession of an ERS certificate natural stone work is also permitted on condition that the contractor or this subcontractor can demonstrate that he can work in accordance with the requirements

subcontractor can demonstrate that he can work in accordance with the requirements laid down in URL 4007. This is subject to the approval of the management.

In accordance with the implementation conditions (URLs: implementation guidelines). in accordance with the requirements set by the ERM (Erkende Restauratiekwaliteit Monumentenzorg)), of:

- URL 4007: Execution Guidelines for Stonework.

### 35.00.40 ALLOCATION OF RISKS AND GUARANTEES: GENERAL

### 01. PARTS TO BE GUARANTEED

A guarantee is required for the following components, which must apply from the completion or delivery of the guaranteed component during the specified period.

Component: processed natural stone.

- to be guaranteed by: the contractor.
- period: 10 years.

### 35.00.60 BUILDING MATERIALS: GENERAL

#### 90. CEMENT

Apply Portland cement class A (NEN 3550).

Apply natural stone in mortar 1 cement, 2.5 sand by volume.



### 91. SUITABILITY FOR PROCESSING

If, due to improper storage, transport, treatment or processing, frost and

transport damage, execution practices of third parties, wrong application, etc., the material is no longer suitable for processing, this at the discretion of the management. The latter may then have the natural stone examined at the contractor's expense, after which the material will be definitively inspected. The costs of demolition, redelivery, transport and installation of the natural stone components concerned shall be borne by the contractor.

### 92. STORAGE

Fresh natural stone should be stored frost-free. As soon as groove water is no longer present, the stone may be exposed to frost.

93. ANCHORS

All anchors to be used of a R.V.S. quality.

### **35.22 CLEANING EXISTING NATURAL STONE**

# 35.22.20-a CLEANING NATURAL STONE, RESTAURATION

RESTORATION WORK, CLEANING EXISTING NATURAL STONE

Component: all natural stone parts in the facade.

Removal of paint layers

Restoration category (URL 4007): 1.

Cleaning: in accordance with a test surface to be set up in the work, to be assessed by the management.

Natural stone type (URL 4007, Appendix 3)

Work to be carried out by Superlook b.v. of Breda

.01 MOULDINGS, OUTER WALL

Cleaning of mouldings and blocks at front and side walls

.02 WATERSLIDE, EXTERIOR WALL

Cleaning of the natural stone waterslides

.03 OUTSIDE WALL

Cleaning of natural stone slabs under the frames of the front facade

.04 FIXED STAIRS

Stairs at entrance and access left side façade

# 35.25 REPAIRING EXISTING NATURAL STONE

#### 35.25.20-a REPAIR NATURAL STONE, RESTAURATION

RESTORATION WORK, REPAIR PART NATURAL STONE

Component: hard stone sills

Restoration category (URL 4007): 2, repair. Grouting: repair of weathered grouting

.01 OUTSIDE WALL

Stone sills front and left side facade

### 35.25.20-b REPAIRING NATURAL STONE, RESTAURATION

RESTORATION WORK, REPAIR COMPONENT NATURAL STONE

Component: bluestone lintel above window frame

Restoration category (URL 4007): 2, repair.

Mode of restoration (URL 4007, Appendix 4, B.6.2.1): cement-based mortar repair.

.01 LINTEL, EXTERIOR WALL

repair crack in lintel, left side wall





### **40 PLASTERWORK**

#### **40.00 GENERAL**

40.00.20 REQUIREMENTS AND EXECUTION: GENERAL

#### NOTIFICATION EXECUTION

Carry out all plastering work after consultation with the management.

The choice of material and substrate of both existing and new masonry are of great importance here.

### 90. RESPONSIBILITY OF SUBSTRATE

It should be expressly stated whether all existing layers are to be removed or all stucco layers are to be removed down to the sound substrate. When applying a plaster system, the plasterer accepts the substrate as being of sufficient quality. If the management is asked for its opinion in the interim, this does not mean that it is responsible or liable with regard to the state of the work upon completion and/or guarantees on the work.

#### 92. STUCK WORK

Apply the plastering work to plumb, level or at the slope indicated, flat and tight under the row, with the necessary profiling, etc.

Apply sufficient protection to protect parts that may be contaminated (wood, brick, tiling, natural stone, etc.).

# **40.25 REPAIRING EXISTING PLASTERWORK**

# 40.25.10-a REPAIR EXISTING PLASTIC WORK

REPAIRING EXISTING PLASTERWORK

Remove loose parts of cement plaster on the clean stone.

After repairing the brickwork of the chimney, apply new cement plaster .01 CHIMNEY

Repair cement plaster of the chimney on the left side



### 43 METAL AND PLASTIC WORK

#### **43.00 GENERAL**

## 43.00.20 REQUIREMENTS AND EXECUTION: GENERAL

### 90. REQUIREMENTS AND EXECUTION GENERAL

- The manufacture of any part shall not be commenced until after approval of the management.
- Approval does not relieve the contractor of his full responsibility for the correct execution, soundness and durability of the construction concerned. construction concerned.
- Use stainless steel in 316 stainless steel quality.

#### 91. DEMONTAGE

All parts to be dismantled should be fitted with metal marking plates temporarily attached with metal wire.

metal marking plates. Metal plates to be provided with a numbering which should be recorded on a drawing. All this in connection with the re-installation of dismantled parts at the existing locations. locations.

#### 92. QUALITY REQUIREMENTS

The following implementation guidelines shall apply to the work to be carried out applicable:

- URL 4012: historic metal (ferrous).

# 43.00.40 ALLOCATION OF RISKS AND GUARANTEES: GENERAL

### 90. PARTS TO BE GUARANTEED

A guarantee is required for the following parts, which must apply from the completion of the part until the handover of the work and subsequently for the period stated.

Component: the new to be delivered and repairs to iron, wrought and cast iron parts.

- To be guaranteed by: contractor.
- period: 3 years.

### 43.25 REPAIRING EXISTING METAL AND PLASTIC WORK

### 43.25.10-a REPAIR METAL PART

0. RESTORATION WORK, REPAIR HISTORICAL METAL PART

Component: scale cladding wall, facade Restoration category (URL 4012): 2.

Repair: fix loose parts and tighten with new scales of equal dimensions.

Material: lead

When replacing parts, apply a minimum lead thickness of NHL 20.

.01 FACADE CLADDING

Repair scaled facade cladding above bay window at front elevation

### 43.26 ADJUST EXISTING METAL AND PLASTIC WORK

### 43.26.10-a COPYING METAL WORK

RESTORATION WORK, COPYING HISTORIC METAL PART

Component: latticework corner facade



Restoration category (URL 4012): 3a.

Copying: in accordance with URL 4012 Historic Metal (ferrous), Section 3.8. Copy.

Material: cast iron.

Method of disassembly: in accordance with URL 4012 Historic Metal (ferrous), Section 3.3.2 Disassembly in workshop.

Method of cleaning: manual (wire brush), in accordance with URL 4012, section 3.4.1 Cleaning in general and 3.4.2 Mechanical cleaning.

Scope copying:

- Replace non-repairable parts

### Pretreatment:

- blasting, in accordance with URL 4012, par. 3.11.2 Pre-treatment.
- degreasing, in accordance with URL 4012, par. 3.11.2 Pretreatment.
- At the contractor's discretion and the approval of management, in accordance with URL 4012, par. 3.11.2 Pretreatment.

#### Surface treatment:

- zinc spraying (scooping), in accordance with URL 4012, par. 3.11.3 Finishing with metallic coatings. Mounting/fixing: with mortar, in accordance with URL 4012, par. 3.12.5 Fixing with mortar. .01 OUTSIDE WINDOW

Repair latticework in front of facade corner



### **45 FINISHING CARPENTRY**

#### **45.00 GENERAL**

45.00.20 REQUIREMENTS AND EXECUTION: GENERAL

#### 90. FINISHWORK

All wood surfaces in contact with concrete, masonry and/or plasterwork, as well as the surfaces not in view, shall be treated twice opaquely with lead paint.

### 91. WORKWORKS

All minor carpentry work resulting from the nature of the work, even if not specified in the specifications or drawings, to be carried out without entitlement to additional settlement.

#### 92. FINISHING

All visible woodwork, whether bare or to be painted, shall be planed or sanded so that machine chipping is not visible.

All joints to be glued with construction adhesive.

#### 95. CONNECTIONS

Welds and corners in the parts shall always be executed as oblique weld respectively mitred.

### 45.00.60 BUILDING MATERIALS: GENERAL

#### 90. WOOD DIMENSIONS

The timber dimensions specified in the specification or drawing are permanent dimensions, i.e. after processing. Where no timber dimensions are given, parts to be renewed are counted as having the same timber dimensions as those present in the work.

### 91. INSPECTION OF WOOD

If factory-made carpentry is provided with the first coats of primer on site, the contractor shall request the management to inspect this carpentry at least 24 hours in advance (excluding Saturdays, Sundays and public holidays).

Without any exception, all timber to be supplied, either at the timber yard or at the carpentry workshop or building site shall be inspected on site.

93. QUALITY OF SPRUCE/WOOD

Spruce: NEN 5466

European Pine: NEN 5467

Carpentry quality class B, sorted out on:

- not sawn through the heart
- kwastaandeel maximum 0.10
- no bevels

#### **45.41 PANELLING**

### 45.41.11-a TIMMERWORK, PROFIFIED WOOD

0. CARPENTRY CLADDING

1. PROFILED TIMBER (NEN-EN 14915:2013)

Type: as existing

Intended use: balcony floor

Profiling: parts.
Timber: pine parts

Thickness (mm): as existing Width (mm): as existing Processing: planed.



Apply sections with a slope away from the façade.
Floor provided with a drainage possibility
.01 BALCONY FLOOR
Repair or replace bad wooden floor parts balcony left side facade



### **46 PAINTING**

#### **46.00 GENERAL**

46.00.20 REQUIREMENTS AND EXECUTION: GENERAL

#### 02. TEMPORARY REMOVAL OF COMPONENTS

Nameplates, advertising signs, etc., affixed to doors, window frames and other elements to be painted shall be removed before commencement of the work and reattached in the same places before completion.

#### 03. REMOVAL OF PAINT LAYERS

The removal of paint and varnish layers with hot air is permitted; the maximum permissible temperature shall be determined by the management after consultation with the local fire brigade.

Burning off is not permitted.

### COLOUR APPLICATION FOR EXTERIOR WORK

The following colour application applies to exterior work:

- To be determined in the work by the management.
- 05. COLOUR APPLICATION FOR INTERIOR WORK

The following colour application applies to interior work:

- To be determined by the management on site.

#### PAINTING ALONG GLAZING

On frames, windows and doors fitted with glazing, paint every layer up to approx. 1 mm on the glass, except for glazing profiles such as condensation profiles, anodised aluminium glazing bars, rubber profiles, etc.

### CHANGES IN PAINT PRODUCT COMPOSITION

Changes in the composition of paint products, such as diluting or adding hardening preparations always require the permission of the management, unless the instructions given by the manufacturer are followed.

#### 12. MARKING REPAIRS

Repairs in the substrate shall not mark off.

# 13. TOP AND BOTTOM OF WINDOWS AND DOORS

The lower and upper sides of windows and external doors shall be painted along.

# 90. KEEP DUST FREE

Make and keep rooms to be painted dust-free.

# 91. REGULATIONS AND GUIDELINES

The following regulations and directives apply:

- "Quality descriptions for paints and related products" and "Inspection methods for paints and related products" issued by the Centre for Research and Technical Advice (COT).

#### 92. GROUND SYSTEMS

Factory-applied ground systems on new structures/components shall be applied by respective supplier.

### 93. DAMAGES

Damage to paint-treated construction parts brought on site shall be repaired in layer thickness of the paint layers already applied.

Transitions must be sanded as flat as possible.

Incomplete systems, which for any reason remain for an extended period, must be cleaned and repaired before further processing.

#### 46.00.23 REQUIREMENTS AND PERFORMANCE: PAINTING NEW SUBSTRATE

### 01. NON-VISIBLE PARTS OF CARPENTRY WORK



Non-visible parts of joinery to be applied that are in contact with the outside air shall have been treated with primer.

### 04. ANTI-CORROSION PAINT ON METAL

Apply the second coat of anti-corrosion paint to metalwork after setting. If parts become inaccessible due to setting or assembly, treat them beforehand with at least a second coat of anticorrosive paint.

#### 90. EXECUTION OF PAINTING WORK

Before glazing, glazing rebates and non-visible surfaces must be primed, precoated and finished twice. It must be ensured that the substrate is free of dirt, grease and dust so that the adhesion of the product to be applied is not impaired. The substrate must be thoroughly dry.

Painting should not be carried out in misty, humid or rainy weather (relative humidity > 85%) and during frost. Damage caused will be repaired by the painter at his own expense.

Avoid damage to other materials/structures.

### 91. TIME OF EXECUTION

If the exterior painting cannot be completed before 1 November, the management will decide to what extent work may continue. If the exterior painting is not completed in the year in question, the work will be resumed in the spring, with the repair of any defects that may have occurred, at a time to be determined in consultation with the management.

In connection with other work, the painting work shall be carried out at a time and pace to be agreed with management.

#### 92. PAINT SYSTEMS ON METALWORK

Metal works to be finished with a paint system must be provided with the first primer(s) in the factory/workshop.

### 93. PROCESSING ADVICE

The management will receive from the executing painting company an advice in 3-fold from the paint manufacturer. All painting work not covered by the technical advice, in consultation with the management.

The painting work must be carried out within 6 months of the issue of the technical advice/maintenance schedule, otherwise request a new advice.

# 94. NON-VISIBLE PARTS

Non-visible parts of carpentry to be applied that come into contact with the outside air must be treated with lead mixing paint, primer or the like.

# 95. MOISTURE CONTENT OF WOOD

Timber, to which the KVT '80 applies, may have a moisture content of maximum 17% in the external layer and maximum 21% in the internal layer.

46.00.29 REQUIREMENTS AND EXECUTION: ADDITIONAL

## 03. DEFECTS IN HINGES AND LOCKS

Any defects in the hardware that come to light before or during the execution of glazing and painting works shall be brought to the attention of the management in writing as soon as possible.

### 90. REGULATIONS

The instructions given by the prescribed manufacturer shall be followed.

On acceptance of the order, the applicator declares to be familiar with the most recently issued specification sheets or the processing instructions and conditions of the prescribed products, to agree to them and to take them into account in the execution.

The systems mentioned in the specifications are based on the prescribed building materials and the information provided about them. Changes may require adjustment.

### 91. WORKSHOPS

Before starting the treatments specified in the specifications (or advice), the room must be swept clean and the surface made clean and dust-free. The latter also applies before applying each coat.

The work described must be carried out by qualified personnel.



For application methods, dilution types and percentages, tools to be used, the descriptions in the corresponding data sheets apply.

### 92. GROUND

Care must be taken to ensure that the substrate is free from dirt, grease and dust so that the adhesion of the product to be applied on it is not impaired. The substrate must be thoroughly dry.

Imperfections of the building material to be treated must be restored to the structure of the substrate. In appropriate cases where this is not entirely possible, technical standards will prevail over aesthetic ones. In joint sealing systems, technical requirements will always prevail over aesthetic ones.

The substrate condition must include not only the right degree of cleaning, but also the moisture content: for wood max. 18%; for stony substrates dry. Measure moisture content with a Protimeter, the indication must be green.

Temperature of substrate must be at least 3 C above dew point, at least 5 C for floor finishes. Before, during and after the application of protective coatings indoors, good ventilation and, if necessary, heating must be provided. As a basic principle, the work, both outdoors and indoors, should be carried out under favourable conditions.

Surface contaminations such as dirt, grease, cement skin, curing compounds, specimen residues, etc. must be removed in good time with appropriate means, provided the cleaning agents do not leave any residue.

Degreasing of substrates with Chlorothene NU o.g.

#### 93. RESPONSIBILITIES

The applicator shall at all times remain responsible for the work carried out by him and compliance with the statutory regulations on working conditions and the environment.

#### 94. GLASSPROOF

The spaces where plastering and painting work is to be carried out should be roof- and glass-tight. Edges of parts to be treated facing outwards belong to external painting.

# 95. STONY SUBSTRATES

These should not be painted before they are sufficiently dry on the surface and, if applicable, sufficiently cured and/or hard and no longer react alkaline, and damages have been repaired. After stripping, remove all

remove.

### 96. CONDITION OF ROOMS

Before starting plastering and/or painting work, spray mortars, screeds etc. must be applied in such a way that they cannot adversely affect the substrate to be treated and the drying process of the plasters or paints to be applied.

With reference to the aforementioned work, the conditioning of the rooms and the substrates must be started immediately, by good ventilation and sometimes also necessary heating, in such a way that the substrates to be treated are sufficiently 'absorbent',

thereby obtaining good anchoring of the plaster to the substrate.

# 97. ZINC SOOTS

Removal of (soluble) zinc salts should be carried out with care by high-pressure cleaning, or thorough rinsing with clean water using non-corrosive tools (e.g. scotch-brite, nylon brushes).

### 98. OUTSIDE WORK

The application of filler coats on exterior work should be limited to the utmost. Never grind putty for exterior work.

If the exterior work cannot be finished on time due to an unworkable period, imperfections in the paint layers already present will have to be repaired in the following season.

46.00.32 INFORMATION TRANSFER: SAMPLES

01. SAMPLES



The samples mentioned below shall serve to assess the following characteristics mentioned with the sample.

Sample: of any colour required by the management.

Assessment characteristics:

- colour at the discretion of the management.

#### 90. TEST AREAS

For in-situ systems set up test surfaces, number as deemed desirable by the management up to a total area not exceeding 6 m2 to assess workability,

flow, gloss and colour of the paints.

#### 46.00.33 INFORMATION TRANSFER: MAINTENANCE INSTRUCTIONS

### 01. MAINTENANCE INSTRUCTIONS

Maintenance instructions to be provided by the contractor:

The painting work carried out.

Language: English and Dutch

Number of copies to be supplied: 3.

Time of issue: completion.

46.00.40 ALLOCATION OF RISKS AND GUARANTEES: GENERAL

### 01. PARTS TO BE GUARANTEED

A guarantee shall be required for the following parts, which shall apply from the completion of the part until the handover of the work and subsequently during the specified period.

Component: the paintwork belonging to the exterior work.

- to be guaranteed by: the contractor.
- period: from completion of the component until handover of the work and thereafter for a period of 5 years,
- on the understanding that in respect of repair costs the contractor bears the costs:
  - a. Within two years of completion 100 %
  - b. In the third year after delivery 60 %.
  - c. In the fourth year after completion 40 %
  - d. In the fifth year after completion 20 %

# 91. PARTS TO BE GUARANTEED

A guarantee is required for the following components, which must apply from the completion of the component until the handover of the work and subsequently for the specified period:

Component: the varnish and moisture-regulating transparent paintwork belonging to the exterior painting work.

- to be guaranteed by: the contractor
- period: 2 years
- on the understanding that with regard to repair costs the contractor shall bear:
  - a. Within ��n year after completion 100 %.
  - b. In the second year after completion 50 %.

# 92. PARTS TO BE GUARANTEED

A guarantee is required for the following components, which must apply from the completion of the component until the handover of the work and subsequently for the period indicated:

Component: the interior painting work.

- To be guaranteed by: the contractor.
- period: 5 years 100%

46.00.50 ASSOCIATED OBLIGATIONS: GENERAL

90. PAINTING ADVICE



The paint supplier shall be obliged to prepare a product description based on the paint finishing systems described in these specifications.

In the event of any gaps or incorrect applications in these specifications, the paint supplier shall make this known to the management or correct it in his description.

The description must be approved by the management before starting the painting work.

### **46.21 EXISTING SURFACE, WOOD**

46.21.11-a BEST. UNDERFR. WOOD, OPAQUE SYSTEM, WATERPR.

HIST. UNDERGR. WOOD, OPAQUE SYSTEM, WATERGEDR.

Component: frames, windows and doors Restoration category (URL 4009): 2, repair.

Repair: in accordance with URL 4009 Historic Painting, par. 3.4.3.3 Interior painting on wood and

Appendix 1, table 1.1.2. Substrate condition: fair

System:

- completely remove existing paint layers
- Whole, 1 layer of primer
- Whole, 2 coats of topcoat.

Remove weathered wood

Repair substrate:

- remove and repair deteriorated wood.
- seal open joints and cracks.
- stop, scuff and grind.
- Repair glazing joints locally in accordance with URL 4009 Historical Painting, par. 3.4.2.6 Repair existing glass and glazing system in wooden substrates.

Application: brush

Assessment colour in accordance with: colour survey

- 3. PRIMER, WOOD, WATERPR.
- 4. TOPCOAT, WOOD, WATERGEDR.
- FILLING MATERIAL

.01 EXTERIOR WINDOW FRAMES/DOORS

All opaque painting of interior exterior window frames, windows and doors.

46.21.12-a BEST. UNDERGR. WOOD, COVERING SYSTEM, SOLVENT-CONTAINING

0. HIST. UNDERGR. WOOD, COATING SYSTEM, SOLVENT-CONTAINING

Component: gutter panelling, flashing/consoles/cuffrails

Restoration category (URL 4009): 2, repair.

Repair: in accordance with URL 4009 Historical Painting, par. 3.4.3.2 Exterior painting on wood and

Appendix 1, table 1.1.1.

Substrate condition: moderate

System:

- partially remove existing paint layers
- Touch-up, 1 coat of primer
- Whole, 2 coats of topcoat.

Clean existing paint layers.

Remove weathered wood.

Repair substrate:

- remove and repair deteriorated wood.



- Seal open joints and cracks.

Colour assessment according to: colour historical research

- 3. PRIMER, WOOD, SOLVENT-CONTAINING
- SOLVENT-BASED TOPCOAT, WOOD
- 5. FILLING MATERIAL

.01 ROOF OVERHANG

All opaque painting of roof overhangs and ornamental joinery

.02 GUTTER

All opaque paintwork on gutter panelling

.03 GUTTERUTTER

All opaque painting of gutter flashings / brackets

.04 EXTERIOR CEILING

All opaque painting of the balconies on the front and left side facade.

### 46.21.12-b BEST. UNDERGR. WOOD, COVERING SYSTEM, SOLVENT CONTAINING

0. HIST. UNDERGR. WOOD, OPAQUE SYSTEM, SOLVENT-CONTAINING

Component: frames, windows and doors Restoration category (URL 4009): 2, repair.

Repair: in accordance with URL 4009 Historical Painting, par. 3.4.3.2 Exterior painting on wood and

Appendix 1, table 1.1.1. Substrate condition: matif

System:

- partially remove existing paint layers
- Touch-up, 1 coat of primer
- Whole, 2 coats of topcoat.

Clean existing paint layers.

Remove weathered wood.

Repair substrate:

- remove and repair deteriorated wood.
- Seal open joints and cracks.
- Repair glazing joints locally in accordance with URL 4009 Historical Painting, par. 3.4.2.6 Repair existing glass and glazing system in wooden substrates.

Assess colour in accordance with: colour historical research

- PRIMER, WOOD, SOLVENT-BASED
- 4. TOPCOAT, WOOD, SOLVENT-BASED
- 5. FILLING MATERIAL

.01 EXTERIOR WINDOW FRAMES/DOORS

All exterior frame, window and door opaque paintwork

.02 EXTERIOR WALL OPENING INFILL

All opaque painting of front wooden bay window

# 46.21.21-a BEST. UNDERGR. WOOD, TRANSPAR. SYSTEM, WATERGEDR.

0. HIST. UNDERGR. WOOD, TRANSPAR. SYSTEM, WATERGEDR.

Component: door frame and door

Restoration category (URL 4009): 2, repair.

Repair: in accordance with URL 4009 Historic Painting, par. 3.4.3.3 Interior painting on wood and

Appendix 1, table 1.1.2. Substrate condition: fair

System:



- partially remove existing paint layers
- Touch-up, 1 layer of stain
- Whole, 2 layers of stain.

Clean existing layers.

Remove weathered wood.

Sand existing layers.

Repair substrate:

- repair deteriorated wood locally
- seal cracks
- seal open joints
- repair glazing joints locally in accordance with URL 4009 Historical Painting, par. 3.4.2.6 Repair existing glass and glazing system in wooden substrates.

Assessment colour in accordance with: existing

- TRANSPARENT IMPREGNATING STAIN, WOOD, WATER-BASED.
- 4. TRANSPARENT PRIMER, WOOD, WATERGEDR.
- 5. TRANSPARENT STAIN, WOOD, WATER-DR.
- 6. VARNISH, WOOD, WATERPR.
- 7. FILLING MATERIAL

.01 OUTSIDE DOOR

All transparent paintwork inside outside door

46.21.22-a BEST. UNDERGR. WOOD, TRANSPAR. SYST., SOLVENT-CONTAINING

0. HIST. UNDERGR. WOOD, TRANSPAR. SYST., SOLVENT-CONTAINING

Restoration category (URL 4009): 2, repair.

Repair: in accordance with URL 4009 Historical Painting, par. 3.4.3.2 Exterior painting on wood and

Appendix 1, table 1.1.1. Substrate condition: fair

System:

- partially remove existing paint layers
- Touch-up, 1 layer of stain
- Whole, 2 layers of stain.

Clean existing layers.

Remove weathered wood.

Sand existing layers.

Repair substrate:

- repair deteriorated wood locally
- seal cracks
- seal open joints
- repair glazing joints locally in accordance with URL 4009 Historical Painting, par. 3.4.2.6 Repair existing glass and glazing system in wooden substrates.

Assessment colour in accordance with: existing

- 3. TRANSPARENT IMPREGNATING STAIN, WOOD, SOLVENT-BASED
- 4. TRANSPARENT PRIMER, WOOD, SOLVENT-BASED
- TRANSPARENT STAIN, WOOD, SOLVENT-BASED
- 6. VARNISH, WOOD, SOLVENT-BASED
- 7. FILLING MATERIAL

.01 EXTERIOR DOOR

All transparent paintwork of exterior door and frame.



## **46.23 EXISTING SUBSTRATE, STONY**

46.23.27-a BEST. SUBSTANCE. STONE, COVERING SYSTEM, SOLVENT-BASED

0. HIST. UNDERGR. STONE, COVERING SYSTEM, SOLVENT-CONTAINING

Component: natural stone facade mouldings and blocks

Restoration category (URL 4009): 2, repair.

Repair: in accordance with URL 4009 Historical Painting, par. 3.5.3.1 Exterior painting on stone and

Appendix 1, Table 1.2.1. substrate: natural stone

System:

- Partially remove existing paint layers
- Touch-up, 1 coat of primer/fixer
- Whole, 2 coats of topcoat.

.01 FRAMING, EXTERIOR WALL

All opaque paintwork of natural stone facade mouldings and blocks front and left side facade



### **50 GUTTERS AND RAINWATER DRAINS**

#### **50.26 ADJUSTING EXISTING GUTTERS AND RAINWATER DRAINS**

50.26.12-a COPYING ROOF GRAFT, Zinc

0. RESTORATION WORK, COPYING GUTTER - ZINC

Component: gutters.

Restoration category (URL 4011): 3a, including work described in URL 4011, par. 3.9.4.4 Gutters in zincr.

Copying: in accordance with the standards laid down as a reference.

Material: sheet zinc. Scope of copying:

entire

Fit new gutters with expansion band, in accordance with URL 4011 Metal roof coverings and gutters at monuments, par. 3.9.4.4 Gutters in zinc.

Secure all fittings with corrosion-resistant steel screws.

1. FLAT ZINC SHEET

Intended use: tray gutter

.01 FLAT ROOF

Replace baking gutter raised extension at rear elevation

#### **50.41 METAL PIPES**

50.41.30-a CONSTRUCTION OF METAL WATER DRAINERS, ZINC BUIS

INSTALLATION OF METAL RAINWATER DRAINS

Construction method:

- In accordance with NEN 3215+C1+A1:2018.

Fixing method:

- bracketed
- Installation of new penetration through existing eaves
- 1. ZINC ROOF DRAINAGE PIPE (NEN-EN 612:2005)

Intended use: rainwater drainage

Shape: round Accessories: - brackets

- tank zinc

.01 RAINWATER DRAIN INSTALLATION

Installation of additional rainwater drainage from the flat roof of the extension to the rear façade Connections:

1 pcs.

- connection(s) to outside sewerage

### **50.42 PLASTIC PIPES**

50.42.10-a CONSTRUCTION OF PLASTIC TEMPERATURE DRAINERS, PLASTIC TEMPERATURE DRAINERS

0. INSTALLATION OF PLASTIC RAINWATER DRAINAGE

Construction method:

- In accordance with NEN 3215+C1+A1:2018.

Replacing PVC rainwater drains

Fixing method:



- bracketed
- Protection method:
- At the location of the façade, apply a steel lower end of 2m1
- 1. PLASTIC RAINWATER DRAINPIPE, PVC

Shape:round

Accessories:

- fastener(s)

.01 RAINWATER DRAIN INSTALLATION

Replacement of PVC rainwater drains

- connection(s) to external sewerage, connecting to existing



### 70 ELECTRICAL INSTALLATIONS

#### **70.00 GENERAL**

70.00.10 TERMS: GENERAL

09. INSTALLER

The items listed in this paragraph shall be carried out by an installer and are outside the construction contract price.

### 70.87 EARTHING AND LIGHTNING CONDUCTOR MATERIALS

#### 70.87.09-a EARTHING AND BLIKSEM PROTECTION

#### GENERAL

For connections between copper pipes, earthing plates etc. and structures of another material (e.g. sheet piling, aluminium eaves, etc.), provisions shall be made by bituminising the copper pipes, earthing plates etc. (underground) and applying special transition pieces (above ground).

#### 1. EARTHING INSTALLATION

The earth distribution resistance of ring cables in foundation beams or outer sides of foundation floors must be measured in consultation with and in the presence of the management before the earth electrodes are connected. The contractor must submit a measurement report (in duplicate) on these measurements to the management. The measurement report must also be present in the revision documents.

Before installing earth electrodes, the contractor must make sure, if necessary by means of sufficient excavation, that cables and/or pipes and cellars, wells etc. in the ground are not damaged.

Method of driving into the ground: with driving rod

Method of connecting the earth electrode: to the earth connection plate in the foundation Method of attachment of measuring coupling: screwed to the protective tube and clamped to the earth wire.

When ground electrodes are struck, the earth diffusion resistance should be measured every 3 metres. The measured values must be recorded in a final report. This measurement report must be handed over (in duplicate) to the management.

After the entire earthing installation has been completed, the earthing resistance on the main earthing rail(s) must be measured in consultation with and in the presence of the management.

For this purpose, the main equalisation conductors, any protective conductors from the transformer star points and the conductors from the PE-rails in the (sub)main distribution boxes must be disconnected from the main earthing rail(s).

The contractor must submit a measurement report (in duplicate) to the management in respect of these measurements. The final values of the earth distribution resistances achieved must be indicated on the revision drawings.

The contractor is obliged to check all connections and is fully liable for all consequences of the improper functioning of the earthing installation, including the equipment to be supplied and/or fitted by him, or on his instructions.

Earthing electrodes shall be wire electrodes.



Wire electrodes shall consist of a continuous wire with a diameter of 50 mm. These earth electrodes shall be electromechanically inserted into the ground using a steel tube.

The steel tube should be left in the ground with the earthing electrodes.

Earthing plates and plug ends must be fitted so that they are easily accessible at all times.

Mounting method main earthing rail: in sight in the vicinity of the main distribution box Mounting height: between 500 and 1000 mm + floor complete with all corresponding fixing materials.

### EARTHING AND PROTECTIVE CONDUCTORS

The contractor is obliged to check all earthing of devices and protective contacts of wall sockets and is fully liable for all consequences of failure of earthing connections. This includes the testing of all socket outlets with special measuring equipment available on the market.

The test/measurement results must be handed over to the management and must also be present in the revision documents.

Central earthing points and grounding points must be isolated from the building structure at easily accessible locations.

The location of the central earthing points and earthing points above the false ceiling must be indicated by means of visibly attached codes.

Potential equalisation points (PV) must be in accordance with the make and type of the installation material used as for the lighting installation.

Potential equalisation points must be mounted in a flush-mounted box and installed with the socket outlets under ��n common cover plate.

The protective conductor between the central earthing point and the PE conductor of the nearest distribution box must be an isolated conductor.

All unprotected earthing conductors, protective conductors, main and supplementary equalisation conductors (possibly designated BC = Blank Cuprum) in corrosion-protected design.

Lay protective conductors loose in cable ducts or cableways.

In shafts, fix protective tubes alongside the cable bundle(s) in the same way as the cables. Outside cable trays or cableways, install protective tubes in plastic protective tubes. Leave connections, bends and branches free.

## SURGE PROTECTION

Connection method: feeder conductors (according to table NEN1010). PU conductor (on HAR or PVR) min.: 10 mm.

The equalisation conductor which forms the connection between the OSB and the HAR may not affect the other conductors and should therefore preferably be shielded and installed separately from the other electrical conductors.

Mounting of identification marks: at or on the device.

Mounting of text plates: red text plate with inscription "Remove for insulation measurement".



Mounting method: on DIN rail in distribution cabinet. In separate compartment.

Exchange: It must be possible to exchange the surge suppressor(s) without interrupting the power supply, and preferably they must be replaceable per connected supply conductor.

Surge arresters should be touch-safe.

#### LIGHTNING CONDUCTOR INSTALLATION

Pipes should consist of electrolytic copper wire or aluminium wire 50 mm, respectively, in accordance with the lightning protection standard.

Watertight roof penetrations around the descending pipes must be installed during the installation of the roof covering.

These penetrations should be installed in consultation with the building management.

The roof penetration pipe around the pipe must be finished watertight.

Outgoing pipes in walls or vertical concrete columns must be installed on the outside. For concrete columns, the concrete cover must be at least 2 cm.

Outgoing pipes, in the case of visible installations, must be surrounded by a protective tube from at least 180 cm above to 20 cm below ground level. This pipe must be fixed to the façade using brass wall blocks. At the top of the protective tube, the outgoing pipe must be fed in with a measuring coupling. The protective tube must be threaded for this purpose.

Copper or brass protective tubes must be bitumen-plated over 50 cm at the bottom. 50 cm at the bottom.

Pipes on chimneys subject to the action of flue gases should be surrounded by a lead jacket with a minimum thickness of 2 mm or made of stainless steel.

Measuring couplings applied to protective tubes shall be of nickel-plated brass and consist of a lower piece to be screwed onto the protective tube with loose split conical tube. The upper piece shall be fixed to the lower piece with a nut, thus establishing the connection between the descending line and the protective conductor.

Measuring couplings, which are not placed on protective tubes, must be made of nickel-plated brass and consist of an upper piece with thread, a lower piece, 2 loose split conical bushings and nut.

Measuring couplings shall have marks to be specified by the management.

Earth electrodes connected to visible descending lines, which have not already been fitted with a measuring coupling or connected to an earth plate, shall be fitted with a measuring inspection well. These pits should be standard commercially available pits fitted with a ground rail. The bottom should be filled with a 5 cm layer of coarse gravel.

Antennas should be connected to the lightning rod installation.

Antennas on buildings without a lightning rod installation should also be earthed in accordance with the lightning protection standard.

Lightning bridges should be with a plastic enclosure in a closed fireproof design.



Measurements as specified in the lightning protection standard must be carried out on the lightning conductor installation. A measurement report (in duplicate) of these measurements must be submitted to the management. The measurement report must also be present in the revision documents.

When using roof trim as part of the lightning protection system, provisions should be made to exclude electrolytic effects.

The roof trim parts shall be interconnected in such a way that they form a galvanic unit. .01 BUILDINGS

Installation of a lightning protection system in accordance with EN IEC 62305.