



OF

CONSTRUCTION PROJECT:

Note: The information and assembly sequences are based on our experience to the best of our knowledge and belief, but must be adapted to the on-site construction site conditions. The information is provided without guarantee. The extent to which the texts can be taken over into the tender unchanged must be checked in each individual case. The described texts are only suggestions for the tender, and mainly contain the positions in which ARDEX products are used. This specification, which has been produced by ARDEX, is not a substitute for the planning responsibility of architects and structural engineers. The completeness of the specification must be checked with regard to all of the items which are relevant and required.

The work must be carried out in accordance with the technical guidelines of ARDEX GmbH, 58453 Witten, www.pandomo.de, taking the relevant standards, regulations and trade rules into consideration in accordance with the current state of the art.

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General information concerning mineral filler

1. Used products:

The bidder must enclose technical data sheets and product data sheets with the bid for all products which are used or consumed in order to manufacture the mineral filler.

Failure to submit the technical data sheets with the bid will result in exclusion from the submission and the bid will not be evaluated.

2. System products:

All products which are used will be purchased from a manufacturer with a system guarantee. This also includes impregnation materials, sealing materials and surface protection. Only materials in original containers which have been standardised and approved or proof of quality testing can be provided in the form of a certificate that is accepted in Germany may be used and installed.

3. Basics:

The generally recognised rules of technology which apply in the country of implementation as well as the latest versions of the provisions, ordinances, European and national standards, regulations, directives, leaflets etc. must be adopted as the basis for the quote, the described work and the implementation of this work.

Reference is particularly made to the "Mineral decorative filler floors" leaflet issued by BSR e.V. in Bonn (May 2013). The proof of legitimacy must be provided by presenting a valid partnership agreement. In accordance with the authorisation, the bidder is entitled to process the products for which he has attended license training.

4. Evaluation:

The presented work list will be used for the quote. Only a fully completed work list can be taken into consideration during the evaluation of the quote. Alternative suggestions in the form of secondary quotes are not permitted.

5. References:

Comparable reference in picture form and a description shall be presented for the implementation of the work. On-site deadlines will also be made possible.

6. Cleaning and care concept:

The cleaning and care instructions made available on the Internet by the manufacturer of the floor covering or enclosed with the quote is regarded as binding for the user. This must be coordinated with the respective use of the project.

| Position | Description | Quantity | Units | EP | GP |
|----------|---|----------|--------------------------|-------|-------|
| 1 | Construction site equipment | | | | |
| 1.1 | <p>General construction site set-up</p> <p>Set-up of construction site for all work listed in the specification. All equipment which is needed to carry out the work must be taken account of. The construction site set-up also includes all of the necessary protective measures for adhering to the accident prevention regulations and measures for your own work.</p> | 0 | Pc | ..... | ..... |
| | | 1 | Construction site set-up | ..... | ..... |

Studio

Studio specifications

| Position | Description | Quantity Units | EP | GP |
|----------|---|----------------|------------------|--------------|
| 2 | Samples | | | |
| 2.1 | Production of sample sections | | | |
| | Manufacture of sample sections in 60x80cm format, colour and structure in accordance with the client's specification. | 0 Pc | ..... | ..... |
| | | | 2 Samples | <u>.....</u> |

Studio

Studio specifications

| Position | Description | Quantity | Units | EP | GP |
|----------|-------------|----------|-------|----|----|
|----------|-------------|----------|-------|----|----|

3 Screed

3.1 Separating layer

Implementation of a 2-way separating layer on a suitable substrate. The technical directives of the manufacturer of the products which are used must be observed.

0 m²

3.2 Screed on separating layer

Delivery and professional installation of a low-shrinkage and low-tension hydraulically quick-hardening, quick drying (on basis of complete crystalline water bonding - ARDURAPID Plus effect) quickly usable and ready for foot traffic and very low emissions (EMICODE EC 1 Plus) quick-drying cement screed made from ternary quick-drying cement binder material with extra-long processing time in accordance with DIN 18560-2 / 18353 with strength class **CT-C30-F5** on the substrate described in the previous positions; including all of the necessary edge strips with mind. d=10 mm. The screed must be carefully and homogeneously compacted in accordance with the manufacturer's technical directives and installed with a planar surface at the correct height in accordance with the requirements in accordance with DIN 18202 tab. 3, line 3. Including rubbing down and smoothing the surface.

Screed requirements

- Ready for foot traffic after 12 hours
- Ready for application after 24 hours
- Suitable for indoors and outdoors, only as sub-screed outdoors
- Long processing time of 120 minutes
- Early strength after 1 day 20 N/mm²
- No re-mixing required
- Dimension-controlled binding material system = almost shrinkage and tension free hardening and drying; shrinkage of less than 0.25 mm/1m
- System product for PANDOMO® Terrazzo/ PANDOMO® filler floors

The technical directives of the manufacturer of the products which are used must be observed.

Guideline recipe (initial test recommended):

- ARDEX PANDOMO® BG low-shrinkage quick-drying screed/terrazzo cement: 62.5 kg
- Screed sand grading curve A8 - B8 in accordance with DIN 1045 part 2 300 kg
- Water binding material value: ≤ 0.42

Readiness for laying has been achieved with the following moisture content/waiting times:

- ARDEX PANDOMO® Terrazzo/ PANDOMO® fillers

Carry over:

Studio

Studio specifications

| Position | Description | Quantity | Units | EP | GP |
|----------|-------------|----------|-------|----|----|
|----------|-------------|----------|-------|----|----|

Carry over:

- (Unheated approx. 3 days; heated ≤ 2.0 CM-%)
- Tiles and insensitive natural stone in thin, medium and thick bed (Unheated approx. 1 days; heated ≤ 2.0 CM-%)
- Sensitive natural stone in thin, medium and thick bed (Unheated approx. 4 days or ≤ 2.0 CM-%; heated ≤ 2.0 CM-%)
- Flexible and textile floor coverings and parquet (Unheated ≤ 2.0 CM-%; heated ≤ 1.8 CM-%)

Nominal screed thickness: _____ mm
 Screed on insulating layer in accordance with DIN 18560-2
 Planned use: _____ (e.g. private/commercial building)
 Planned covering _____ (e.g. PANDOMO®)
 Traffic loads: _____ kN/m² surface load _____ kN individual load

Products:
 ARDEX PANDOMO® BG low-shrinkage quick-drying screed/terrazzo cement
 or equivalent make / type: '.....'
 Screed sand grading curve A8 - B8 in accordance with DIN 1045 part 2

0 m²

3.3 Extra strength of screed

Extra strength of screed per 5 mm.

0 m²

3 screed

Studio

Studio specifications

| Position | Description | Quantity | Units | EP | GP |
|--------------|---|----------|----------------|-------|-------|
| 4 | Substrate preparation | | | | |
| 4.1 | Floor substrate preparation | | | | |
| 4.1.1 | Checking the substrate | | | | |
| | Checking of substrate, tensile bond testing and CM measurement. | | | | |
| | | 0 | Pc | ..... | ..... |
| 4.1.2 | Removal of coarse dirt | | | | |
| | Removal of coarse dirt and disposal of rubble by customer in containers. | | | | |
| | | 0 | m ² | ..... | ..... |
| 4.1.3 | Crack gumming | | | | |
| | Solid gumming of cracks, shrinkage gaps and predetermined breaking points in screed. Manufacture of slits across the crack at intervals of 25 cm using a circular saw, insertion of screed ties and grouting with ARDEX EP 2000, ARDEX EP cast resin or ARDEX P 10 SR. After pouring, the casting compound must be sprinkled with filler powder. The technical directives of the manufacturer of the products which are used must be observed. | | | | |
| | | 0 | Pc | ..... | ..... |
| 4.1.4 | Sanding the substrate | | | | |
| | Mechanical sanding and brushing of the substrate and removal of all adhesion-reducing layers and production of a load-bearing substrate. | | | | |
| | | 0 | m ² | ..... | ..... |
| 4.1.5 | Production of a load-bearing substrate | | | | |
| | Manufacture of a load-bearing substrate for holding PANDOMO® filler using ARDEX A46 or ARDEX FIX System Filler, for repairing cavities, unevenness and cracks. The technical directives of the manufacturer of the products which are used must be observed. | | | | |
| | | 0 | m ² | ..... | ..... |
| 4.1.6 | Cutting in and sealing of movement joints in the screed | | | | |

Carry over:

Studio

Studio specifications

| Position | Description | Quantity | Units | EP | GP |
|----------|-------------|----------|-------|----|----|
|----------|-------------|----------|-------|----|----|

Carry over:

Clean the field and boundary joints created in the screed and cut off the positioning strips as low down as possible. The cleaned joint is filled with a suitable bead of foam at a depth of approx 10 mm and then filled with ARDEX P 10 SR, 2-K Epoxy Resin, sprinkling with PANDOMO® HG-G, hard grain sand. Levelness with the adjacent components is required. The above-mentioned joint will be filled in during the implementation of the PANDOMO® filler floor. After polishing the PANDOMO® filler floor, the joints are opened again with an immersion saw. Implementation along suitable guide rails is required. After completing the floor the joint is cleaned and sealed with a suitable natural stone silicon ARDEX ST or ARDEX SC Matt during the course of the silicone work.

0 m

4.1.7 Movement joints alternatively with joint profile

Supply stainless steel movement profile with bracket on both sides and install with ARDEX PU5. The cost of measuring and setting up alignments and lines for installing the movement joint profiles will be paid for separately against receipts. The technical directives of the manufacturer of the products which are used must be observed.

0 m

4.1.8 Shrinkage gap profile / edge profile

Supply shrinkage joint profile / edge profile, one sided bracket, height **please enter** mm and fit using ARDEX PU5 or P10SR in accordance with the manufacturer's specifications. The cost of measuring and setting up alignments and lines for installing the shrinkage gap profile / edge profile will be paid for separately against receipts. The manufacturer's technical directives must be observed.

- a) Stainless steel
- b) Brass
- c) PVC
- d) Alternative

Type _____ Manufacturer _____

0 m

4.1.9 Edge insulating strips

Carry over:

Studio

Studio specifications

| Position | Description | Quantity | Units | EP | GP |
|----------|-------------|----------|-------|----|----|
|----------|-------------|----------|-------|----|----|

Carry over:

Supply and fit suitable edge insulating strips such as ARDEX TP10. When using PANDOMO® Floor and FloorPlus, the edge strip must be sealed with acrylic, such as ARDEX RF
The technical directives of the manufacturer of the products which are used must be observed.

0 m

**4.1.10 Eventual position
Height compensation for preparation**

Application of the PANDOMO® EP primer (primer and bonding course) onto the cleaned substrate. Levelling of the primed substrate with ARDEX FA-20, ARDEX K39 or ARDEX K80 with a coating thickness of **please enter** mm, possible treated with ARDEX E25 artificial resin dispersion.
The technical directives of the manufacturer of the products which are used must be observed.

0 m² **E-price only**

4.1.11 Priming

Application of priming on the cleaned substrate with PANDOMO® EP NEU solvent-free epoxy resin primer. Coating takes place using a short nap roller and is sanded down in a wetted condition with dry PANDOMO® HG hard grain sand.
The technical directives of the manufacturer of the products which are used must be observed.

0 m²

**4.1.12 Eventual position
PANDOMO® FAM glass fibre mesh (used on calcium sulphate cavity floors) Floor/FloorPlus**

Laying out of the PANDOMO® FAM glass fibre mesh and application of a priming filler with PANDOMO® EP NEU, fillable, solvent-free epoxy resin primer. Application takes place using a suitable pellet knife, and the surfaces is then sprinkled with dry ARDEX QS, ARDEX PANDOMO® HG sand in a wet condition.
The technical directives of the manufacturer of the products which are used must be observed.

0 m² **E-price only**

4.1 Floor substrate processing

Studio

Studio specifications

| Position | Description | Quantity | Units | EP | GP |
|--------------|---|----------|----------------|--------------|--------------|
| 4.2 | Wall and ceiling substrate preparation | | | | |
| 4.2.1 | Removal of dust and dirt | | | | |
| | Removal of dust and dirt from the substrate and all loose parts and production of a load-bearing substrate. The manufacturer's technical directives must be observed. | 0 | m ² | ..... | ..... |
| 4.2.2 | Production of a load-bearing substrate | | | | |
| | Production of a load-bearing substrate for holding PANDOMO® filler using ARDEX A46 or ARDEX FIX System Filler, for repairing cavities, unevenness and cracks. The manufacturer's technical directives must be observed. | 0 | m ² | ..... | ..... |
| 4.2.3 | Applying a renovation filler | | | | |
| | ARDEX R 1 renovation filler on wall / ceiling Apply to wall/ceiling surfaces, solid, load-bearing and separating material free, with a coat thickness of please enter mm, max. 10 mm. The manufacturer's technical directives must be observed. | 0 | m ² | ..... | ..... |
| 4.2.4 | Applying a primer | | | | |
| | Application of the primer with ARDEX P4 on the cleaned substrate in one work operation: Apply ARDEX P4 using a short-pile roller and wait for it to dry. The manufacturer's technical directives must be observed. | 0 | m ² | ..... | ..... |
| | 4.2 Wall and ceiling substrate preparation |  |  | ..... | ..... |
| | 4 Substrate preparation |  |  | ..... | ..... |

Studio

Studio specifications

| Position | Description | Quantity | Units | EP | GP |
|----------|-------------|----------|-------|----|----|
|----------|-------------|----------|-------|----|----|

5 Application

5.1 Filling with PANDOMO® Studio white, floor

Production of a filling with PANDOMO® Studio white in colour **please enter** in accordance with PANDOMO® swatch, shapeable thin layer filler, with a coating thickness of at least 2 mm on a prepared substrate in three layers. Application of filler compound using a spring spatula. In order to achieve a concrete-like finish, the individual layers are post-processed using an electric power trowel.

Properties:

- Easy to process
- Excellent adhesion
- Extremely high-yield
- High surface strength
- Low tension
- Quickly ready for footfall traffic and load-bearing

The technical directives of the manufacturer of the products which are used must be observed.

0 m²

5.2 Filling with PANDOMO® Studio concrete grey, floor

Production of a filling with PANDOMO® Studio concrete grey, shapeable thin layer filler coloured in the factory, with a coating thickness of at least 2 mm on a prepared substrate in three layers. Application of filler compound using a spring spatula. In order to achieve a concrete-like finish, the individual layers are post-processed using an electric power trowel.

Properties:

- Easy to process
- Excellent adhesion
- Extremely high-yield
- High surface strength
- Low tension
- Quickly ready for footfall traffic and load-bearing

The technical directives of the manufacturer of the products which are used must be observed.

0 m²

5.3 Additional allowance PANDOMO® Studio, floor

Additional allowance for increased installation thickness per mm, maximum layer thickness 4 mm.

Carry over:

Studio

Studio specifications

| Position | Description | Quantity | Units | EP | GP |
|----------|-------------|----------|-------|----|----|
|----------|-------------|----------|-------|----|----|

Carry over:

The technical directives of the manufacturer of the products which are used must be observed.

0 m²

5.4 Filling with PANDOMO® Studio white, wall and ceiling

Production of a filling with PANDOMO® Studio white in colour **please enter** in accordance with PANDOMO® swatch, shapeable thin layer filler, with a coating thickness of at least 1.5 mm on a prepared substrate in two layers. Application of filler compound using a spring spatula. In order to achieve a concrete-like finish, the individual layers are post-processed using an electric power trowel.

Properties:

- Easy to process
- Excellent adhesion
- Extremely high-yield
- High surface strength
- Low tension
- Quickly ready for footfall traffic and load-bearing

The technical directives of the manufacturer of the products which are used must be observed.

0 m²

5.5 Filling with PANDOMO® Studio concrete grey, wall and ceiling

Production of a filling with PANDOMO® Studio concrete grey, shapeable thin layer filler coloured in the factory, with a coating thickness of at least 1.5 mm on a prepared substrate in two layers. Application of filler compound using a spring spatula. In order to achieve a concrete-like finish, the individual layers are post-processed using an electric power trowel.

Properties:

- Easy to process
- Excellent adhesion
- Extremely high-yield
- High surface strength
- Low tension
- Quickly ready for footfall traffic and load-bearing

The technical directives of the manufacturer of the products which are used must be observed.

0

5 Application

| Position | Description | Quantity | Units | EP | GP |
|----------|---|--|----------------|-------|-------|
| 6 | Surface treatment | | | | |
| 6.1 | Polishing/sanding of the surface | | | | |
| 6.1.1 | Surface polishing, filler compound | | | | |
| | Polishing of the PANDOMO® filler compound with a suitable sanding machine (e.g. Trio from Lägler, Festool, Mirka etc.) The manufacturer's technical directives must be observed. | | | | |
| | | 0 | m ² | ..... | ..... |
| | | 6.1 Polishing/sanding of the surface <u>.....</u> | | | |

Studio

Studio specifications

| Position | Description | Quantity | Units | EP | GP |
|----------|-------------|----------|-------|----|----|
|----------|-------------|----------|-------|----|----|

6.2 Impregnating the surface

6.2.1 PANDOMO® SP-SL

Application of two coats of oil impregnation PANDOMO® SP-SL stone oil.
 The technical directives of the manufacturer of the products which are used must be observed.

0 m²

6.2 Impregnating the surface

Studio

Studio specifications

| Position | Description | Quantity | Units | EP | GP |
|----------|--|---|----------------|-------|-------|
| 6.3 | Sealing the surface | | | | |
| 6.3.1 | Priming the surface PANDOMO® Primer (1:1) diluted with water is recommended as the primer for PANDOMO® SP-PS. Applied with a microfibre roller, crosswise. | 0 | m ² | ..... | ..... |
| 6.3.2 | PANDOMO® SP-PS Application of PANDOMO® SP-PS polyurethane sealant in two forms. Application takes place crosswise, using a short pile roller If no impregnation using PANDOMO® SP-SL or impregnation has been used, or the surfaces are heavily used and require a considerable amount of cleaning effort, a third application is required. The technical directives of the manufacturer of the products which are used must be observed. | 0 | m ² | ..... | ..... |
| | | 6.3 Sealing the surface <u>.....</u> | | | |

| Position | Description | Quantity | Units | EP | GP |
|------------------------------|--|----------|----------------|-------|---------------------|
| 6.4 | Surface treatment | | | | |
| 6.4.1 | Eventual position PANDOMO® SP-F pore filler Application of the PANDOMO® SP-F pore filler after approx.12 hours of drying of the first application (not required if using PANDOMO® SP-PS). The technical directives of the manufacturer of the products which are used must be observed. | 0 | m ² | ..... | E-price only |
| 6.4.2 | Eventual position PANDOMO® SP-GS Silk Gloss Seal Application of PANDOMO® SP-GS Silk Gloss Seal with a wipe coating. After approx. 60 minutes, application of the second coat of PANDOMO® SP-GS. The technical directives of the manufacturer of the products which are used must be observed. | 0 | m ² | ..... | E-price only |
| 6.4.3 | Eventual position PANDOMO® SP-MS Silk Gloss Seal Application of PANDOMO® SP-MS Silk Gloss Seal with a mopping pad. After approx. 60 minutes, application of the second coat of PANDOMO® SP-MS. The technical directives of the manufacturer of the products which are used must be observed. | 0 | m ² | ..... | E-price only |
| 6.4 Surface treatment | | | | | <u>XXXXXXXXXXXX</u> |

| Position | Description | Quantity | Units | EP | GP |
|----------|-------------|----------|-------|----|----|
|----------|-------------|----------|-------|----|----|

6.5 Final cleaning

6.5.1 PANDOMO® Care & Clean maintenance care

Application of PANDOMO® Care & Clean maintenance care with a cleaning coating.
 The technical directives of the manufacturer of the products which are used must be observed.

0 m²

6.5.2 Cleaning and care concept/ Maintenance agreement

The bidder's quote must be accompanied by cleaning and care instructions specified by the manufacturer of the floor covering or a cleaning concept which is coordinated with the floor which he has manufactured. This must be coordinated with the respective use of the project. A maintenance agreement with a defined term and work description must also be produced for the floor manufactured by the bidder. The contents of the agreement must be:

- Subject of agreement and term
- Defined work of the agreement
- Defined maintenance and service work
- Defined repairs and improvements
- Term and remuneration
- Client obligations
- Contractor obligations

0 Pc

6.5 Final cleaning

| Position | Description | Quantity | Units | EP | GP |
|----------|---|------------|------------------------------------|--------------------------|--------------|
| 6.6 | Permanently elastic sealing | | | | |
| 6.6.1 | ARDEX SN Neutral Silicon Permanently elastic sealing with ARDEX SN neutral silicone. The manufacturer's technical directives must be observed. | 0 | m | ..... | ..... |
| 6.6.2 | ARDEX ST Natural Stone Silicone Manufacture of elastic joints with ARDEX ST Natural Stone Silicone in accordance with the technical regulations, width up to 10 mm. | 0 | m | ..... | ..... |
| | | 6.6 | Permanently elastic sealing | <u>.....</u> | |
| | | | 6 | Surface treatment | <u>.....</u> |

Studio

Studio specifications

| Position | Description | Quantity | Units | EP | GP |
|----------|---|----------|--|--------------|--------------|
| 7 | Specialist worker hours / additional effort | | | | |
| 7.1 | Specialist worker hours Specialist worker in accordance with proof for e.g. sampling, processing and casting defects, processing at ramps and rails etc. Materials such as: Resin, sand and casting compounds are billed for in accordance with the actual consumption in complete packages. | 0 | Hrs | ..... | ..... |
| 7.2 | Increased work effort and long transport distances Surcharge for increased work effort and long transport distances. | 0 | Pc | ..... | ..... |
| | | 7 | Specialist worker hours / additional effort | ..... | ..... |

Summary

| | | |
|-----|---|---------------|
| 1 | Construction site equipment | ..... |
| 2 | Samples | ..... |
| 3 | Screed | ..... |
| 4.1 | Floor substrate preparation | ..... |
| 4.2 | Wall and ceiling substrate preparation | ..... |
| 4 | Substrate preparation | ..... |
| 5 | Application | ..... |
| 6.1 | Polishing/sanding of the surface | ..... |
| 6.2 | Impregnating the surface | ..... |
| 6.3 | Sealing the surface | ..... |
| 6.4 | Surface treatment | XXXXXXXXXXXXX |
| 6.5 | Final cleaning | ..... |
| 6.6 | Permanently elastic sealing | ..... |
| 6 | Surface treatment | ..... |
| 7 | Specialist worker hours / additional effort | ..... |
| | Sum total | ..... |
| | Plus VAT at % | <u>.....</u> |
| | Grand total | <u>.....</u> |