

PART 1 - GENERAL

- 1.1**
Extent of works
- Non-exhaustive list
1. Prepare existing surfaces affected by demolition work, as per the written recommendations of the manufacturer of the floor finish.
 2. Provide and install resilient sheet flooring for floors.
 3. Provide and install baseboards.
 4. Provide and install welded joints (when applicable).
 5. Provide and install finishing mouldings required to complete the structure.
- 1.2**
Related works
- Non-exhaustive list
- | | | |
|----|-----------------------|-----------|
| .1 | Sealing products..... | 07 92 00E |
| .2 | Carpet | 09 68 00E |
| .3 | Paint | 09 91 26E |
- 1.3**
Documents to be submitted
- .1 Provide a copy of the manufacturer's installation instructions, as per the prescriptions of section 01 33 00E.
 - .2 Provide a document specifying the humidity level of the concrete slab as well as the pH level, respecting the manufacturer's installation instructions.
- Perform the required number of tests (at each different location).**
- .3 Submit a cutting plan indicating the direction of rollers and the location of cuts; specify the colour(s) of the flooring and the different welding seams as per section 01 33 00E.
- 1.4**
Reference standards
- Conform to current, applicable standards (latest version). When submitting documents, specify the reference standard or standards and the edition year.
- Non-exhaustive list:
ACNOR / CSA and ASTM, as required.
- 1.5**
Samples to be submitted
- .1 Submit samples as per the prescriptions of section 01 33 00E.
 - .2 Provide two (2) resilient sheet flooring samples measuring 300 x 300mm, and two (2) samples of these accessories: decorative strips, mouldings, borders and others measuring 300mm in length.
- 1.6**
Installation conditions
- .1 Maintain ambient air and the support surface at a temperature greater than 20°C for a period of 48 hours prior to installation, throughout installation and for 7 days after.
 - .2 Concrete substrates must have a minimum compressive strength of 3500 lb/in² (25Mpa).
 - .3 The concrete slab must cure for a minimum of 28 days and be dry before work begins.

- .4 Do not proceed with the installation of the flooring on a concrete slab whose humidity level exceeds 5 lbs/1000 sq.ft as per F-1869-98 standard. The concrete's pH must not be greater than 9.5. If necessary, contact the manufacturer's technical representative.

**1.7
Quality control**

- .1 A manufacturer-certified installer shall be present on site during the installation of the linoleum flooring.
- .2 Submit a document indicating the manufacturer's approval of the adhesive that the installer plans to use for the work included in this section.
- .3 Provide a document indicating the status of member in good standing of the *Fédération Québécoise Des Revêtements De Sol* (FQRS).
- .4 The consultant shall approve the application surface before the flooring is installed.

**1.8
Maintenance and/or
replacement materials**

- .1 Provide the equivalent of five percent (5%) of the sheet flooring, in each colour, pattern and type necessary to maintain the current structure in good condition.
- .2 Replacement materials must be all of a piece and come from the same production batch as the installed materials.
- .3 Clearly identify each roller and each container of adhesive.

**1.9
Maintenance sheets**

- 1. Provide instructions relating to the maintenance of resilient flooring and incorporate them into the maintenance manual specified in the general conditions. Conform to section 01 78 00E.

**1.10
Guarantee**

- 1. Provide a guarantee certificate, signed and issued in the name of the ministerial representative, stipulating all works in the current section are guarantee against any defect for a period of five (5) years starting from the date of signature of the provisional acceptance certificate. Conform to section 01 78 00E.

**1.11
Scheduling**

- 1. **Work carried out in two phases, see drawings limits.**
- 2. **Scheduling, see section 01 32 18E** and directive Ministerial representative.
- 3. The place of work is within an occupied building.

**1.12
Guarantee**

- 1. Provide a certificate of guarantee, signed and issued on behalf of the Ministerial representative, stating that all the works in this section are warranted against defects for a period of five (5) years from the date of signature of the certificate of provisional acceptance work. Comply with section 01 78 00E.

PART 2 - PRODUCTS

2.1 Materials

1. **Flooring:**

Marmoleum **Real**, by **Forbo Linoleum** or equivalent approved before bidding ends, 2.5 mm thick, color of the **Ministerial representative's choice**.

Linoleum sheets in accordance with CAN/CSA A-146 standard, made from natural ingredients, mixed and calendared onto a jute backing, as per the following prescriptions:

 - Made with linseed oil from linseed grown in Saskatchewan, Canada.
 - Linoleum made with a minimum of 45% post-industrial recycled content.
 - Resistance to discolouration as per ASTM F1514, minimum of 6 on the blue scale.
 - Electric and anti-static resistance as per ASTM F150.
 - Made using a two-coat (2) calendaring process.
 - Containing no cork, lead or cadmium.
 - Made as per ISO 14001 environmental standard.
 - Static load resistance of 450 psi for the roller and/or 1200 psi per square as per ASTM F970 standard.
 - Fire and smoke-spread resistance as per CAN/ULC S102.2.
 - Resistance to chemical products as per ASTM F925.
 - Surface protected with TOPSHIELD.
 - Meets ASTM F2034 standard.
 - Provide a life cycle analysis of the product.
 - Possessing bactericidal properties against MRSA and C. difficile, as per the TNO method and CRIQ.
2. **Floor covering's adhesive:**

Forbo L910W (without solvent) and based on location, Forbo LINOTACK #414 adhesive (4% solvent) or high resistance alkaline, SBR type and applied with recommended trowel No. 15 by Richards. The installer must ensure that the material is put down in wet, freshly applied adhesive.
3. **Welding seam:**

Unless otherwise specified in the drawings, lay flooring wall to wall, without any joints.

When the joints between the coatings are required to the drawings, provide a string type Marmoweld by Forbo Linoleum, solid or marbled colour, Ministerial representative's choice. Submit the range of colour available from the manufacturer and samples measuring 300mm in length, for final approval.

2.2 Accessories

1. **Rubber baseboard:**

Rubber baseboard, 3.17mm, such as DC-63 "BURNT UMBER", 114mm in height with base, such as Johnsonite inc., maximum useful length.

2. **Rubber moulding adhesive:**

For porous surface: 960 "Cove Base Adhesive" by Johnsonite Inc.

For non-porous surface: 946 "Premium Contact Adhesive" by Johnsonite Inc.

3. **Rubber transition moulding:**

Vinyl transition moulding such as CTAXXC by Johnsonite inc.

The colour is the Ministerial consultant's choice. Submit the range of colors available from the manufacturer and 300mm long samples for final approval.

4. **Cement self-leveller:**

High-performance, quick-setting, self-levelling underlayment such as Ultraplan 1 Plus by Mapei. The thickness must be minimized in order to not alter floor levels. According to the manufacturer's recommendations, plan on applying a primer that is compatible with this coating.

PART 3 - WORK

**3.1
Inspection and test before
execution of work**

1. Using the test methods recommended by the flooring manufacturer, ensure that the concrete floor is dry and free of any trace of alkalinity, carbonization or dust. If wood surfaces are found, advise the consultant and wait for instructions before continuing.
2. Before beginning work, perform a picking test in a spot that is typical of the site's conditions. Install a 610mm x 610mm piece, using the fillers and adhesives prescribed for the work. Let the sample dry for 24 hours, then perform the picking test, taking care to check the adhesion of various elements. Do not undertake the work if adhesion is weak.
3. Allow 72 hours before beginning work in order to test the humidity level of the concrete slab as well as establish the pH level.

**3.2
Treatment of the subfloor
and the base of the wall**

- .1 Scratch and remove old glue. Flatten out unevenness in the subfloor and the base of the wall. Fill in cavities, cracks, joints, holes and other defects using a repairing mortar, after the product has been approved by the manufacturer of the self-levelling cement coating.
- .2 Flatten out unevenness in the support as per F710 standard (3mm by 3 metres), fill in saw marks and depressions. Plug up cracks, joints, holes and other defects using a self-levelling underlayment as per the prescriptions of the flooring manufacturer.
- .3 Clean the floor to be covered, apply filler with a trowel and a mortar board to obtain a surface that is uniform, hard, smooth and flat. Do not allow foot traffic until the filler has hardened and dried.
- .4 Remove dust, old adhesive, paint, mud, wax, sealant and other foreign substances from the existing surface.
- .5 Prime the surfaces as per the recommendations of the manufacturer of the finishing products.

3.3 Installing the flooring

1. In order to facilitate installation, store the Linoleum (marmoleum) upright at a temperature greater than 20°C for at least 48 hours.
2. Evenly apply the adhesive using the recommended trowel. Avoid spreading the adhesive over too large a surface so that it does not set before the flooring is put in. Immediately clean excess adhesive.
3. **Order supplies for installation wall to wall, seamless. Take and verify all dimensions on site before ordering material.**
4. **When joints in the floor covering is required and / or required by the work. Get on-site confirmation from the Ministerial consultant as to the layout of products with respect to the previously approved cutting plan.**
5. Lay down the flooring by forming joints that are parallel to the building's lines, so as to obtain a symmetrical pattern. Immediately after it is put down, roll a 150-pound roller (68KG) in both directions.
6. Twenty-four (24) hours after installation (**when applicable**), use a hot-air gun to weld the joints of the linoleum sheets with the Marmoweld seam, as per the manufacturer's documentation.
7. To hot-weld the joints, a 2-mm groove will have to be made with an appropriate tool to ensure a proper weld. A 5-mm seam in a colour similar to that of the flooring should be used. A sample will have to be submitted first for approval.
8. Cut the flooring and carefully adjust it around fixed objects.
9. In doorways, stop the flooring under the door's transverse axis if the finish and/or colour of the flooring is different in the adjacent rooms.
10. Install transition mouldings between two different materials.
11. Apply a seam of protective sealant along the perimeter of door frames and around objects. Seal as per the manufacturer's instructions and current applicable standards.
12. After laying down the linoleum (Marmoleum), wait 72 hours before moving equipment on wheels and 7 days before moving heavy equipment.
13. After laying down the linoleum (Marmoleum), wait 48 hours before cleaning and preparing as per the manufacturer's maintenance manual.

3.4 Installing baseboards and mouldings

- .1 Install appropriate finishing mouldings, approved by the consultant, level and using pieces that are as long as possible. Baseboards must cover the entire perimeter of the walls and be in proper contact with the ground.
- .2 Coordinate the installation of transition mouldings with adjacent flooring. See plan for locations.
- .3 Use the adhesive recommended by the moulding manufacturer, based on the existing substrate. This product should also be approved.
- .4 Remove any trace of adhesive and other substances from the flooring.

CIMAISE
V/Réf. : A12-5.2.1
N/Réf : 09350-55

Flexible sheet lining

Section 09 65 16E
Page 6 de 6
March 31st 2013

**3.5
Cleaning**

1. Carefully remove excess adhesive from flooring, baseboards and walls.
2. Wash with mild, pH-neutral soap and clean water approximately 48 hours after installation. Dry.
3. **Do not simonize, unless indicated in the specifications of the chosen product.**

**3.6
Protecting finished
surfaces**

1. Protect new flooring from the moment the adhesive has set to the moment of provisional acceptance.
2. Do not allow foot traffic on the flooring for 48 hours following installation.

*****END*****