
SECTION 03100 - CONCRETE FORMWORK (FloorVoid™)- Patented

This section includes mold-resistant (patented) ,corrugated paper void form materials to create a temporary support for the placement of concrete slabs over expansive soils. **FloorVoid™** creates a void space beneath structural concrete slabs, allowing expansive soils to swell without damage to the structure. **FloorVoid™** can also be used to displace concrete volume in applications where reduction in weight or cost of the structure is a consideration (i.e. blockouts, bridge deck applications, etc).

Information contained herein is intended to be included as a supplement to Section 03100 - Concrete Formwork.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Corrugated paper void form materials(mold-resistant) to create a temporary support for the placement of structural concrete slabs over expansive soils.

1.2 SUBMITTALS

- A. Submit product data and manufacturer’s installation instructions under provisions of Section 01300 for corrugated paper formwork and accessories.

PART 2 PRODUCTS

Edit the following descriptive specifications to identify project requirements:

FloorVoid™ products can be designed to offer an approximate response to moisture by specifying the interior components’ makeup as follows:

1. Extra Fast – Non-wax impregnated, plain Kraft paper(mold-resistant) and a water-soluble adhesive
2. Fast – Non-wax impregnated, plain Kraft paper (mold-resistant) and a moisture-resistant adhesive
3. Moderate – Plain Kraft paper(mold-resistant) with a wax impregnated medium, but non-wax impregnated liners and a moisture-resistant adhesive
4. Slow – Plain Kraft paper (mold-resistant) with wax impregnated medium / liners and a moisture-resistant adhesive
5. Extra Slow – Wet-strength paper(mold-resistant) with wax impregnated medium / liners and a moisture-resistant adhesive

The standard strengths of **FloorVoid™** are designed for any average working load ranging from approx. 1000 p.s.f. – 2,000 p.s.f. in increments of about 200 lbs. Custom strengths up to 3,000 p.s.f. are available upon request.

FloorVoid™ is available in ready-to-use, friction locked™, assembled form, as well as knockdown (K.D.) form for shipping and storage savings. The standard length of each piece is 48”. Pieces are easily crosscut with a handsaw to fit as required. Available void depths range from 4” to 18”. Pieces can be stacked in layers to achieve depths greater than 18”.

Related Products:

1. Beamvoid™ – used to create void space directly under grade beams or walls.
2. PileVoid – used to properly create void space adjacent to the upper portion of drilled piers at the intersection of the slab, under pier caps, or at a transition in pier diameter.

Where brackets are indicated [], a choice needs to be made by design engineer. Remove options not needed for a particular project.

2.1 PREFABRICATED VOID FORMS

A. FloorVoid™ Forms:

1. Function: used to create void space directly under structural concrete slabs.
2. Composition: mold-resistant, corrugated paper material with a moisture resistant exterior, and having an interior fabrication of a uniform, cellular configuration, composed of [Extra Fast] [Fast] [Moderate] [Slow] [Extra Slow] moisture response components.
3. Depth: [(_____) inches deep] [depth as indicated on drawings].
4. Profile: rectangular shape in cross section.
5. Strength: capable of sustaining an average working load [of (_____) p.s.f.] [for slab thickness of (_____) inches based on manufacturer's recommendations].

Accessories:

- a. PileVoid Forms –properly create void space adjacent to the upper portion of drilled piers at the intersection of the slab, under pier caps, or at a transition in pier diameter.
 - b. Protective Cover Board ([275-C fully wax impregnated paper] [1/8" hardboard] [1/4" hardboard] [(_____) inch plywood]) – distributes working load, bridges small gaps, and protects void material from puncture and other damage during concrete placement.
6. Acceptable Products / Manufacturer: **FloorVoid™**, **BeamVoid™**
Manufactured by:

VoidForm International Ltd.
75 Cole Ave, Winnipeg, Manitoba
www.voidforminternational.com
1-800-528-3302

PART 3 EXECUTION

3.1 INSTALLATION

A. FloorVoid™ Forms:

1. Store void forms and accessories in accordance with manufacturer's recommendations.
2. Prepare ground surface on a level plane. There should be no capillary break below the void form unless otherwise directed by the designing engineer or architect.
3. Assemble knockdown (K.D.) products as recommended by manufacturer to develop designed strengths.
4. Install void forms and accessories in accordance with manufacturer's recommendations.
5. Place a layer of protective cover board over void forms to distribute working load, bridge small gaps, and protect them from puncture and other damage during concrete placement.
6. Protect void forms from moisture, and replace wet or damaged pieces before placing concrete.
7. Maintain moisture and humidity levels beneath the slab after the concrete sets.
8. Never wrap entire **FloorVoid™** in poly, as this will hinder degradation of the form.

END OF SECTION