

# SLABS

PATIOS, WALKWAYS, POOLSIDES & STEPPING STONES



## PHYSICAL AND GEOMETRICAL CHARACTERISTICS




CHARACTERISTICS	CSA A231.1 <sup>2</sup>	TECHO-BLOC
Compressive strength	-	6 500 psi [45 MPa] min.
Flexural strength	650 psi [4.5 MPa] min.	650 psi [4.5 MPa] min.
Freeze-thaw durability with use of deicing salt	Loss of 0.102 lb/ft <sup>2</sup> [500 g/m <sup>2</sup> ] max. at 28 cycles Loss of 0.246 lb/ft <sup>2</sup> [1200 g/m <sup>2</sup> ] max. at 49 cycles	Loss of 0.102 lb/ft <sup>2</sup> [500 g/m <sup>2</sup> ] max. at 28 cycles Loss of 0.246 lb/ft <sup>2</sup> [1200 g/m <sup>2</sup> ] max. at 49 cycles
Water absorption	-	5% (max.)
Dimension tolerance <sup>1</sup>	$\pm \frac{1}{8}$ " [3 mm] height $-\frac{1}{32}$ " [1 mm] to $+\frac{1}{16}$ " [2 mm] length and width	$\pm \frac{1}{8}$ " [3 mm] height $-\frac{1}{32}$ " [1 mm] to $+\frac{1}{16}$ " [2 mm] length and width
Warpage	$\pm \frac{1}{16}$ " [2 mm] Dimension of 17 $\frac{11}{16}$ " [450 mm] and less $\pm \frac{1}{8}$ " [3 mm] Dimension over 17 $\frac{11}{16}$ " [450 mm]	$\pm 2$ mm $\pm 3$ mm

Notes : 1. The dimension tolerance is not applicable to split facings or other architectural finish.

2. CSA A231.1, Precast concrete paving slabs.

# Installation guide

## TYPICAL APPLICATION USAGE

SECTOR	TRAFFIC TYPE & APPLICATIONS	SLABS
RESIDENTIAL	 <p><b>1. Light traffic</b> Cars and occasional light service trucks (ex. residential driveways)</p>	- Blu 60 mm (6 x 13)
	 <p><b>2. Pedestrian</b> Pedestrian only and at all times (ex. patios)</p>	<ul style="list-style-type: none"> <li>- Aberdeen</li> <li>- Blu 60 mm</li> <li>- Blu Grande</li> <li>- Borealis</li> <li>- Dunes</li> <li>- Inca</li> <li>- Industria Slab (60 mm)</li> <li>- Maya</li> <li>- Ocean Grande</li> <li>- Para (High Definition)</li> <li>- Travertina Raw</li> <li>- Tux</li> </ul>
ICI (Industrial, Commercial and Institutional)	 <p><b>3. Pedestrian</b> Pedestrian only and at all times, without cars, or trucks or other mobile equipment (ex. terraces, parks, pedestrian walkways)</p>	<p>Adjustable pedestal applications:</p> <ul style="list-style-type: none"> <li>- Blu Grande</li> <li>- Industria Slab (60 mm)</li> </ul>

# Installation guide

## SLABS

### INSTALLATION OUTLINE

#### 01 EXCAVATION

- A. Before excavating, call all the local utility companies (e.g., phone, gas, electrical) to ensure that the area in which you plan to dig is clear of underground cables or wires. If any are found, please notify the appropriate companies before you continue.
- B. When excavating, it is important to achieve a slope in increments of  $\frac{3}{16}$ " per ft (5 mm per 300 mm) which will allow for proper drainage. The excavation should mirror final grade of pavement.
- C. The width of the base behind the edge should be equivalent to the thickness of the base.
- D. With the help of a rake, grade the bottom of the excavated area. If the natural soil is granular or sandy we recommend that you compact the soil with a vibrating plate. If the soil is clay-like, change the soil with a blend of lime and crushed stone prior to compaction. Next, cover it with a layer of geotextile membrane to prevent the contamination of the base (clay and 0- $\frac{3}{4}$ " [0-20 mm] crushed stone). Refer to the table "**Thickness of the Granular Foundation**" (on next page) to find the minimum thickness of foundation required.

#### 02 FOUNDATION

- A. Install the 0- $\frac{3}{4}$ " (0-20 mm) crushed stone base in 4" (100 mm) lifts with a minimum 5,000 lbf (22 kN) vibrating plate compactor.
- B. To facilitate compacting, wet the base material thoroughly and compact with a vibrating plate proceeding in all directions. Continue this process until you achieve the desired height. At this stage, you can verify the final height with the help of a paver.
- C. Base tolerance ffl  $\frac{3}{8}$ " (10 mm) for every 10' (3-m) increment.

#### 03 THE SETTING BED

- A. On the compacted crushed base, install two pipes with an outside diameter of 1" (25 mm). Grade the concrete sand with the help of a straight edge (or Quick-E leveler). If the base isn't properly graded and smooth, imperfections will be evident in the finishing grade of the pavement.
- B. Once the setting bed is graded, pre-compact with a hand tamper, then lightly fluff.

#### 04 INSTALLATION OF SLABS

- A. Once the choice of slabs and the design have been finalized, it is recommended you start installing the slabs at a 90-degree angle. To obtain a 90-degree angle, use the rule of a 3 / 4 / 5-triangle. To do this, proceed as follows: measure a first horizontal line of 3' (1-m) and a second line of 4' (1.2 m) perpendicular to the first. Connect a third straight line of 5' (1.5 m), which will form a triangle, and the result will be a perfect 90-degree angle. While installing the slabs, walk on the installed slabs and fill in gaps caused by the pipes with concrete sand.
- B. It is always recommended that you use more than two cubes at a time in order to maximize the color blends. Furthermore, you should proceed with the cubes from top to bottom.
- C. You may use a chalk line to mark the stones to be cut along the borders, using a concrete saw. When cutting slabs, we recommend you wear protective ear and eyewear.
- D. Once you finish installing the slabs, you can then install Belgik, Pietra, Tundra, or Avignon curbstone. To keep curbs in place, add mortar along the back between the ground and the curbstone or, when available, use their plastic retention systems.

#### 05 FILLING IN JOINTS

- A. Spread out the polymer stabilizer sand on the slabs, and sweep in between joints in all directions.
- B. Remove excess sand and follow the instructions exactly as indicated on the polymer stabilizer sand packaging.
- C. The use of a vibrating plate is not recommended on slabs.

# Installation guide

## SLABS



### VIBRATING PLATE ALERT!

We do not recommend passing the vibrating plate on slabs.

### THICKNESS OF THE GRANULAR FOUNDATION<sup>1</sup>

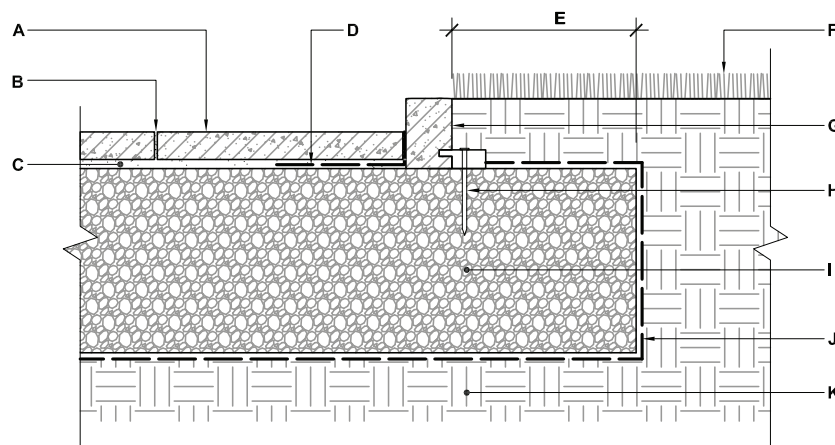
RESIDENTIAL PROJECTS	TYPE OF EXISTING SOIL	
	Clayey or Silty <sup>2</sup>	Sandy or Gravelly
<b>Patios and Walkways</b>	250 to 350 mm (10" to 14")	150 to 200 mm (6" to 8")

1. Data shown in this chart are provided as guidelines only. The range of values suggested depends particularly on existing soil conditions. The thicker the granular foundation, the greater the increase in stability of the whole structure.
2. In the case of unstable soils or ones particularly affected by the freeze-thaw cycles, a thicker foundation may be necessary. For soils with these conditions or for commercial, industrial, or institutional works, a geotechnical professional should be consulted.

### QUANTITY CHART FOR JOINTS FILLING

Approximate surface coverage per 50 lbs (22.7 kg) polymeric sand bag.

SLABS	size	sq. ft	sq. m	SLABS	size	sq. ft	sq. m	
<b>Aberdeen</b>	30×30	483	44.87	<b>Industria 600 series</b>	600×600×60	204.13	18.96	
	30×20	388	36.05		<b>Ocean Grande</b>		129.7	12.1
	30×10	243	22.56	<b>Travertina Raw</b>		30×30	483	44.87
	20×20	324	30.07			30×20	388	36.05
	20×10	216	20.08		20×20	324	30.07	
			20×10		216	20.08		
<b>Blu 60 mm</b>		90.2	8.37	<b>Tux</b>	12×12	133	12.36	
<b>Blu 60 mm (6"×13")</b>		42.63	3.96		12×24	178	16.54	
<b>Blu Grande</b>	60×495×825	118.49	11.01					
<b>Borealis</b>	2.25×5×30	124.64	11.58					
	2.25×10×30	233.03	21.65					
<b>Dunes</b>		29.4	2.7					
<b>Inca</b>		108.3	10.06					



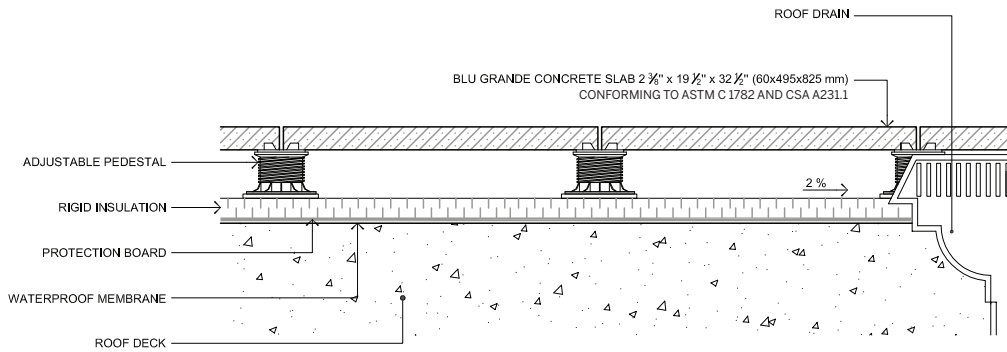
- A. TECO-BLOC PRECAST CONCRETE SLAB 1 3/4" TO 2 3/8" (45 TO 60 mm)
- B. SAND JOINT FILL
- C. SAND SETTING BED (CONCRETE SAND) 1" (25 mm)
- D. GEOTEXTILE 12" (300 mm) WIDE
- E. EXTRA WIDTH EQUAL TO FOUNDATION THICKNESS
- F. LAWN
- G. EDGE RESTRAINT
- H. NAIL
- I. COMPACTED GRANULAR BASE 0-3/4" (0-20 mm)
- J. GEOTEXTILE
- K. SUBGRADE

**SLAB INSTALLATION**  
Typical cross section

# Installation guide

## SLABS ON PEDESTAL SET

### BLU GRANDE



### INDUSTRIA SLAB

