

# PAVERS

DRIVEWAYS, PERMEABLE DRIVEWAYS & PATIOS



## PHYSICAL AND GEOMETRICAL CHARACTERISTICS





CHARACTERISTICS	CSA A231.2 <sup>2</sup>	TECHO-BLOC
Compressive strength	50 MPa [7200 psi] min.	50 MPa [7200 psi] min.
Freeze-thaw durability with use of deicing salt	Mass loss (max.): 225 g/m <sup>2</sup> at 28 cycles 500 g/m <sup>2</sup> at 49 cycles	Mass loss (max.): 225 g/m <sup>2</sup> at 28 cycles 500 g/m <sup>2</sup> at 49 cycles
Absorption	-	5% (max.)
Dimension tolerance <sup>1</sup>	Length and Width: -1.0 mm [0.039 in.] to +2.0 mm [0.079 in.] Thickness: ±3.0 mm [0.118 in.]	Length and Width: -1.0 mm [0.039 in.] to +2.0 mm [0.079 in.] Thickness: ±3.0 mm [0.118 in.]

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

2. CSA A231.2, Precast concrete pavers.

# Installation guide

## TYPICAL APPLICATION USAGE

SECTOR	TRAFFIC TYPE & APPLICATIONS	PAVERS
RESIDENTIAL	 <b>1. Light traffic</b> Cars and occasional light service trucks (ex. residential driveways)	<ul style="list-style-type: none"> <li>- Allegro</li> <li>- Antika</li> <li>- Blu 80 mm</li> <li>- Blu 80 mm (6 x 13)</li> <li>- Eva</li> <li>- Flagstone</li> <li>- Linea (small rectangles)</li> <li>- Mista Grande</li> <li>- Mista Random</li> <li>- Mista Square</li> <li>- Parisien (square, rectangle, circle)</li> <li>- San Marino (small rectangles)</li> <li>- Sleek</li> <li>- Valet</li> <li>- Victorien 60 mm</li> <li>- Villagio</li> <li>- All products from traffic type 2 &amp; 3.</li> </ul>
	 <b>2. Road traffic</b> Cars, heavy trucks, buses (ex. boulevards, main or secondary streets, pedestrian crossings, industrial, ports and airport areas)	<ul style="list-style-type: none"> <li>- Industria 200 x 200</li> <li>- Industria 300 x 100</li> <li>- Industria 300 x 150</li> <li>- Industria 300 x 300</li> </ul>
ICI (Industrial, Commercial and Institutional)	 <b>3. Light traffic</b> Cars and occasional light service trucks (ex. parking lots, sidewalks)	<ul style="list-style-type: none"> <li>- Industria 200 x 400</li> <li>- Industria 600 x 300</li> <li>- Industria 600 x 600</li> <li>- Linea (large rectangles)</li> <li>- San Marino (large rectangles)</li> <li>- All products from traffic type 2.</li> </ul>
	 <b>4. Pedestrian</b> Pedestrian only and at all times, without cars, or trucks or other mobile equipment (ex. terraces, parks, pedestrian walkways)	<ul style="list-style-type: none"> <li>- Blu 80 mm (6 x 13)</li> <li>- Industria 600 x 100</li> <li>- Industria 600 x 200</li> <li>- Linea (small rectangles)</li> <li>- San Marino (small rectangles)</li> <li>- Sleek</li> <li>- All products from traffic type 2 &amp; 3.</li> </ul>

# Installation guide

## INTERLOCKING CONCRETE PAVEMENT

### 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 begin.
- B. When excavating, it is important to achieve a slope in increments of 1.5% ( $\frac{3}{16}$ " per ft/5 mm per 300 mm), which will allow for proper drainage. The excavation should mirror the final grade of pavement.
- C. The width of the base behind the edge should be equivalent to the thickness of the base.
- D. Using 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 fabric 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 a 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 have achieved the desired height. At this stage, you can verify the final height with the help of a paver.
- C. Base tolerance  $\pm\frac{3}{8}$ " (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 is not properly graded and smooth, imperfections will be evident in the finishing grade of the pavement.
- B. Bedding sand should not be compacted until all paving stones have been laid down. Passing the vibrating plate over the paving stones causes them to settle approximately  $\frac{3}{8}$ " (10 mm) into the bedding sand.

#### 04 INSTALLATION OF PAVING STONES

- A. Once the choice of paving stones and the design have been finalized, we recommended that you start installing the pavers at a 90-degree angle. To do so, 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. The result will be a perfect 90-degree angle. While installing the paving stones, walk on the installed pavers, 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 blend. 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 guillotine or a concrete saw. When cutting paving stones, we recommend that you wear protective ear and eyewear.
- D. Once you finish installing the paving stones, you can then install Tundra, Avignon, Belgik or Pietra curbstone on the granular base. To keep curbs in place, add mortar along the back to form a 45-degree angle between the ground and the curbstone or, when available, using the plastic retention system. In a vehicular traffic application, the mortar must be reinforced using steel rods.

#### 05 FILLING IN JOINTS

- A. Spread out the polymer stabilizer sand on the paving stones and sweep in between joints in all directions.
- B. Pass a vibrating plate in all directions to allow sand to penetrate between the joints.
- C. Sweep once more and remove excess sand. Follow the instructions exactly as indicated on the polymer stabilizer sand packaging.

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## INTERLOCKING CONCRETE PAVEMENT



### VIBRATING PLATE ALERT!

Avoid scuffs on paver surfaces. Pavers with embossed surfaces (high and low points) are more susceptible to scuff marks from plate compactors. Techo-Bloc recommends the use of urethane mats between the plate and the paver surface when compacting. Techo-Bloc will not be held responsible for compaction scuffs or burns on pavers.

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

RESIDENTIAL PROJECTS	TYPE OF EXISTING SOIL	
	Clayey or Silty <sup>2</sup>	Sandy or Gravelly
Driveways	300 to 500 mm (12" to 20")	200 to 350 mm (8" to 14")
Patios and Walkways	250 to 350 mm (10" to 14")	150 to 200 mm (6" to 8")

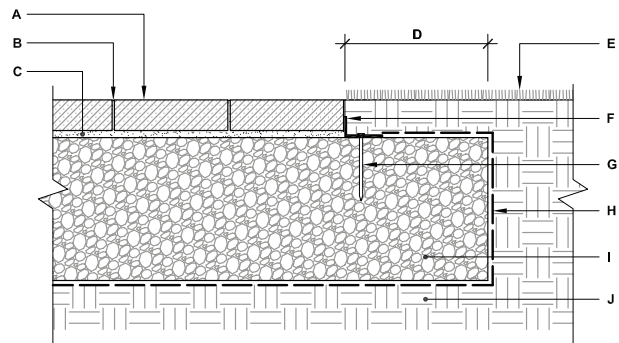
1. Data shown in this chart are provided as guidelines only. The range of values suggested depends particularly on existing soil conditions. The thicker the granular foundation, the greater the increase in stability of the whole structure.
2. In the case of unstable soils or ones particularly affected 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.

PRODUCTS	sq. ft	sq. m
Allegro	38	3.5
Antika	21	2
Blu 80 mm	76.5	7.11
Blu 80 mm (6"×13")	31.97	2.97
Eva	143.56	13.34
Flagstone	66	6.13
Industria 200 series - 200×200	41.03	3.81
Industria 200 series - 200×400	54.57	5.07
Industria 300 series - 300×100	30.77	2.86
Industria 300 series - 300×200	41	3.81
Industria 300 series - 300×300	61.39	5.70
Industria 600 series - 600×100	35.06	3.26
Industria 600 series - 600×200	61.32	5.70
Industria 600 series - 600×300	81.72	7.59
Industria 600 series - 600×600	122.48	11.38
Linea and San Marino small rectangles	31.47	2.92
Linea and San Marino large rectangles	42.33	3.93
Mista random	50.4	4.69
Mista square	65.6	6.10
Mista Grande	25.67	2.38
Parisien square	100.64	9.35
Parisien rectangle	120.55	11.20
Parisien circle	49.25	4.58
Sleek	76.5	7.1

PRODUCTS	sq. ft	sq. m
Valet	24.1	2.2
Victorien 60 mm	97.06	9.02
Victorien 80 mm	72.79	6.76
Villagio	18.50	1.72

### TYPICAL PAVER CROSS SECTION WITH PLASTIC EDGE



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