

# PAVERS

DRIVEWAYS, PERMEABLE DRIVEWAYS & PATIOS







## PHYSICAL AND GEOMETRICAL CHARACTERISTICS

CHARACTERISTICS	CSA A231.2
Compressive strength	50 MPa min.
De-icing salt freeze-thaw durability	Mass loss (max.): 225 g/m <sup>2</sup> after 28 cycles, or Mass loss (max.): 500 g/m <sup>2</sup> after 49 cycles
Dimensional tolerance	Length and Width: -1.0 mm to +2.0 mm Thickness: ± 3.0 mm

Notes: Dimensional tolerances prior to the application of architectural finishes.

# INSTALLATION GUIDE

## TYPICAL APPLICATION USAGE

SECTOR	TRAFFIC TYPE & APPLICATIONS	PAVERS
RESIDENTIAL	 <p><b>1. Light traffic</b> Cars and occasional light service trucks (ex. residential driveways)</p>	<ul style="list-style-type: none"> <li>- Allegro</li> <li>- Antika</li> <li>- Aquastorm</li> <li>- Blu 80 mm</li> <li>- Blu 80 mm (6 x 13)</li> <li>- Diamond</li> <li>- Eva</li> <li>- Hexa 100 mm</li> <li>- Industria 300 x 900 (see Note 1)</li> <li>- Industria 600 x 900 (see Note 1)</li> <li>- Linea (small rectangles)</li> <li>- Mika</li> <li>- Mista Grande &amp; Random</li> <li>- Parisien (square, rectangle)</li> <li>- Sleek</li> <li>- Squadra</li> <li>- Travertina Raw</li> <li>- Valet</li> <li>- Victorien 60 mm</li> <li>- Villagio</li> <li>- Westmount</li> <li>- All products from traffic type 2 &amp; 3.</li> </ul>
	 <p><b>2. Road traffic</b> Cars, heavy trucks, buses (ex. boulevards, main or secondary streets, pedestrian crossings, industrial, ports and airport areas)</p>	<ul style="list-style-type: none"> <li>- Industria 150 x 150</li> <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)	 <p><b>3. Light traffic</b> Cars and occasional light service trucks (ex. parking lots, sidewalks)</p>	<ul style="list-style-type: none"> <li>- Aquastorm</li> <li>- Hexa 100 mm</li> <li>- Industria 200 x 400</li> <li>- Industria 450 x 150</li> <li>- Industria 450 x 300</li> <li>- Industria 600 x 300</li> <li>- Industria 600 x 600 (see Note 1)</li> <li>- Linea (large rectangles)</li> <li>- All products from traffic type 2.</li> </ul>
	 <p><b>4. Pedestrian</b> Pedestrian only and at all times, without cars, or trucks or other mobile equipment (ex. terraces, parks, pedestrian walkways)</p>	<ul style="list-style-type: none"> <li>- Aquastorm</li> <li>- Blu 80 mm (6 x 13)</li> <li>- Diamond</li> <li>- Hexa 100 mm</li> <li>- Industria 450 x 100</li> <li>- Industria 600 x 100</li> <li>- Industria 600 x 200</li> <li>- Industria 300 x 900</li> <li>- Industria 600 x 900</li> <li>- Industria 900 x 900</li> <li>- Linea (small rectangles)</li> <li>- Sleek</li> <li>- Westmount</li> <li>- All products from traffic type 2 &amp; 3.</li> </ul>

Note 1: For vehicular applications, it is recommended that this product be installed on a concrete base as designed by a local Engineer.

# 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 Avignon 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.

# INSTALLATION GUIDE

## 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
<b>Driveways</b>	8" to 14" (200 to 350 mm) Minimum	6" to 10" (150 to 250 mm) Minimum
<b>Patios and Walkways</b>	6" to 8" (150 to 200 mm) Minimum	4" to 6" (100 to 150 mm) Minimum

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 per polymeric sand bag of 50 lbs (22.7 kg)

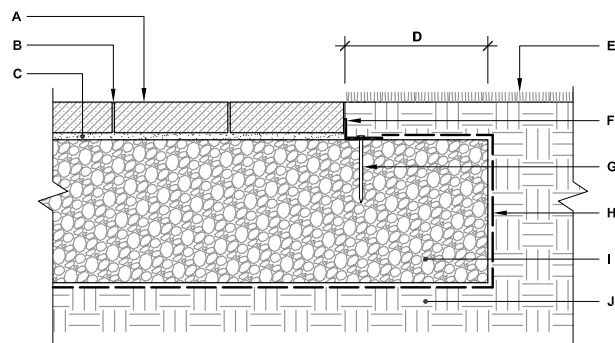
PRODUCTS	sq. ft	sq. m
<b>Allegro</b>	38	3.5
<b>Antika</b>	21	2
<b>Blu 80 mm</b>	76.5	7.11
<b>Blu 80 mm (6"×13")</b>	31.97	2.97
<b>Diamond</b>	28.4	2.64
<b>Eva</b>	143.56	13.34
<b>Hexa 100 mm</b>	61.1	5.7
<b>Industria 150 series - 150×150</b>	31.6	2.94
<b>Industria 200 series - 200×200</b>	41.03	3.81
<b>Industria 200 series - 200×400</b>	54.57	5.07
<b>Industria 300 series - 300×100</b>	30.77	2.86
<b>Industria 300 series - 300×200</b>	41	3.81
<b>Industria 300 series - 300×300</b>	61.39	5.70
<b>Industria 450 series - 450 x 100</b>	33.5	3.11
<b>Industria 450 series - 450 x 150</b>	46.4	4.31
<b>Industria 450 series - 450 x 300</b>	73.5	6.83
<b>Industria 600 series - 600×100</b>	35.06	3.26
<b>Industria 600 series - 600×200</b>	61.32	5.70
<b>Industria 600 series - 600×300</b>	81.72	7.59
<b>Industria 600 series - 600×600</b>	122.48	11.38
<b>Industria 900 series - 900 x 300</b>	103.5	9.6
<b>Industria 900 series - 900 x 600</b>	166.5	15.5
<b>Industria 900 series - 900 x 900</b>	208.4	19.4
<b>Linea small rectangles</b>	31.47	2.92
<b>Linea large rectangles</b>	42.33	3.93
<b>Mika</b>	16.41	1.53
<b>Mista random</b>	50.4	4.69
<b>Mista Grande</b>	43.4	4

<b>Parisien square</b>	100.64	9.35
<b>Parisien rectangle</b>	120.55	11.20
<b>Sleek</b>	97.12	9.03
<b>Squadra</b>	14.50	1.35
<b>Travertina Raw</b>	16.41	1.53
<b>Valet</b>	24.1	2.2
<b>Victorien 60 mm</b>	97.06	9.02
<b>Villagio</b>	18.50	1.72
<b>Westmount</b>	25.3	2.4

Topsoil quantity in lb (kg) to cover an area of 1 sq.ft (1 sq.m) to fill in between joints and the paver cavity.

PRODUCTS	lbs/sq. ft	kg/sq. m
<b>Aquastorm</b> (see Permeable Pavers section)	12.60	61.40

### 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