

## **SEMMA**

**DESCRIPTION:** Wall double-sided **TEXTURE:** Split Face

#### **PALLET OVERVIEW**





#### **COMPATIBLE CAPS**

See page 141 for product compatibility.

#### **NOTES**

When building a double-sided wall one pallet will cover an average of 21.74 ft<sup>2</sup>.

The corner units for the Semma block should be glued with a concrete adhesive.

The corner unit can be used as a right or left corner unit and as a regular unit.

Metric measures are approximate.

See page 136 to 157 for more technical information.

Specifica	ations per palle	et	Imperial		Metric	
			40 units		40 units	
Cubing		26.25 ft <sup>2</sup>		2.44 m <sup>2</sup>		
		53.33 lin. ft		16.26 lin. m		
Approx. Weight			2 363 lbs		1 072 kg	
Number o		5				
Coverage		5.25 ft <sup>2</sup>		0.49 m <sup>2</sup>		
Linear cov	erage per row		10.67 lin. ft		3.25 lin. m	
L2 H	A	Unit dimension	s in	mm	Units/pallet	
		Heigh		150	30 units	
	100	Dept		279		
AR	YEY MODERN	Length		406		
REGULAR		Length	2 10 ½	266		
R						
,		Heigh		150	10 units	
K	AC. Adir A.	Dept		279		
CORNER	AT MANAGE	Length	1 16	406		
0		Length	2 10 ½	266		



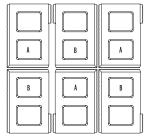




## **SEMMA**

**DESCRIPTION:** Corner or Pillar **TEXTURE:** Split Face

#### PALLET OVERVIEW





#### **COMPATIBLE CAPS**

See page 141 for product compatibility.

#### **NOTES**

See page 136 to 157 for more technical information.

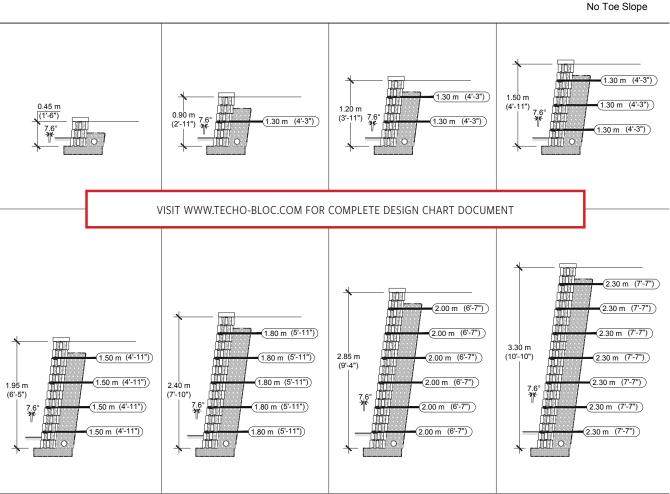
Specifications per pallet	Imperial		Metri	Metric	
Cubing	24 units	24 units		24 units	
Approx. Weight	1 403 lbs	1 403 lbs 636 kg		(g	
Number of rows	4				
Pillar height	35 ¾ in	35 ½ in 900 mm			
	Unit dimensions	in	mm	Units/pallet	
H A-B	Height	5 %	150	24 units	
	Depth	10 ½	266	12 right corners	
	Length	16	406	12 left corners	



GEOGRID: MIRAGRID 3XT BY TENCATE (RFd=1.10, RFcr=1.45, RFid=1.25, Cds=0.9, Ci=0.9)

REINFORCED SOIL: GRAVEL/ SAND AND GRAVEL MIXES (Ø=35°,  $\gamma$  = 22 kN/m³)

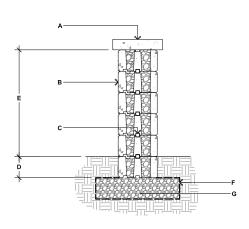
CASE N° 1: No Surcharge No Backslope



- 1. The information contained in the design charts is supplied for information purposes only and as such should only be used for preliminary
- The height (H) of the wall is the total height from the leveling pad to the top of the wall not including the thickness of the cap.
- Soil parameters: reinforced soil ( $\phi$  = 35°,  $\gamma$  = 22 kN/m³); retained soil ( $\phi$  =26°,  $\gamma$  = 20 kN/m³); foundation soil ( $\phi$ =26°,  $\gamma$  = 20 kN/m³)
- A qualified engineer should be consulted for the final design to be used for construction.
- The foundation soil must be able to support the wall system. The bearing capacity of the foundation soil, settlement, and global stability must be verified and validated by a qualified geotechnical engineer.
- The seismic analysis is not included.
- The design charts do not apply to tiered walls.
- The charts assume that the walls are constructed in accordance with Techo-Bloc specifications, good construction practice and an adequate drainage system.
- The geogrid layout has been optimized to satisfy the design requirements of the NCMA's Design Manual for Segmental Retaining Walls, 3rd Edition.
- The minimum burial depth must be 150 mm (6 in) or 10% of the exposed height, whichever is greater.
- 11. Engineering judgement should be used when interpolating between heights.
- 12. Techo-Bloc and its predecessors, successors, beneficiaries, employees, associates, administrators and insurers accepts no liability for the incorrect use of information contained in the design charts.
- 13. For further information, please contact our technical service department.

## **INSTALLATION GUIDE**

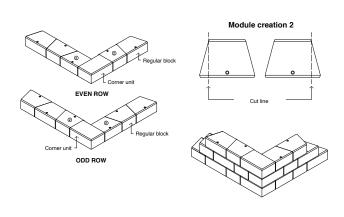
#### FREESTANDING WALLS - SEMMA



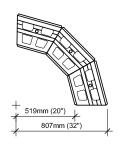
#### **SEMMA**

- TECHO-BLOC CAP UNIT SECURED TO UNIT BELOW WITH FLEXLOCK ADHESIVE
- SEMMA DOUBLE-SIDED WALL UNIT SECURE EACH ROW WITH FLEXLOCK ADHESIVE B.
- C.
- D. EMBEDMENT DEPTH, 6" (150 mm) MIN.
- 29 7/16" (750 mm) MAX.
- GEOTEXTILE F.
- COMPACTED GRANULAR LEVELING PAD, 6" (150 mm) THICK MIN. THICKNESS ACCORDING TO PROJECT SPECIFIC CONDITIONS

#### 90° CORNER OF A DOUBLE-SIDED WALL

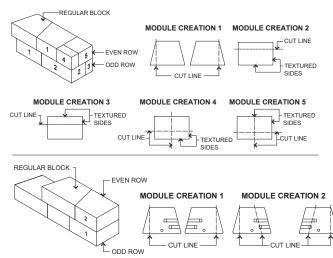


#### **DOUBLE-SIDED WALL RADIUS**



It is the user's responsibility to verify for the quantity of materials required.

#### **DOUBLE-SIDED WALL - END OF A STRAIGHT WALL**



#### **GENERAL NOTES**

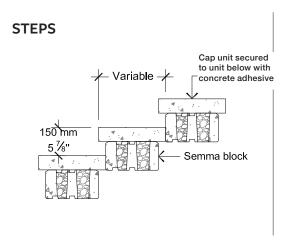
- 1. Alternate odd and even rows.
- 2. Stagger joints from one row to the next.
- 3. Glue all modules at each row with Flexlock adhesive.
- 4. Cavities, grooves and connectors are not illustrated to avoid overloading the image.

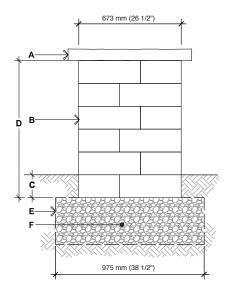
## **INSTALLATION GUIDE**

#### **PILLARS - SEMMA**

## **SEMMA**

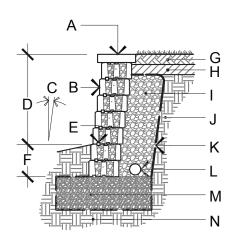
- **A.** PILLAR CAP UNIT (SECURE WITH FLEXLOCK ADHESIVE)
- B. SEMMA PILLAR UNIT SECURE EACH ROW WITH FLEXLOCK ADHESIVE
- C. EMBEDMENT 6" (150 mm) MIN.
- **D.** 35 \( \gamma\_{16}''\) (900 mm), HEIGHT PER PALLET 47 \( \gamma\_{4}''\) (1200 mm), MAXIMUM HEIGHT
- F. COMPACTED GRANULAR BASE 6" (150mm) THICK MIN. THICKNESS ACCORDING TO PROJECT SPECIFIC CONDITIONS





For all possible combinations of pillars and caps, please refer to the correspondence table on page 141

#### **GRAVITY AND REINFORCED WALLS - SEMMA**



# A В Κ O Μ

#### **GRAVITY WALL DETAIL**

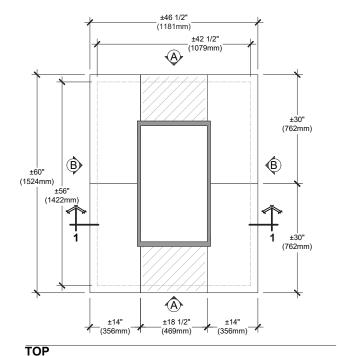
- CAP FROM TECHO-BLOC
- SEMMA BLOCK FROM TECHO-BLOC
- WALL INCLINATION (7.6°)
- D. **EXPOSED HEIGHT**
- HDPE HORIZONTAL KEY
- EMBEDMENT DEPTH
- TOP SOIL
- н. LOW PERMEABILITY SOIL
- 3/4" (20 mm) CLEAN STONE, 13" (330 mm) THICK MIN.

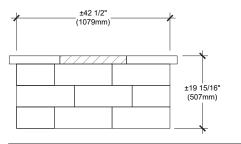
#### **REINFORCED WALL DETAIL**

- RETAINED SOIL
- GEOTEXTILE
- PERFORATED DRAIN
- LEVELING PAD М.
- FOUNDATION SOIL
- GEOGRID 0.
- REINFORCED SOIL
- GEOGRID LENGTH

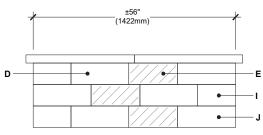
## **INSTALLATION GUIDE**

#### FIREPIT - SEMMA

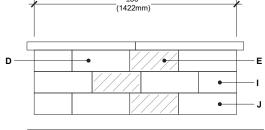




#### **ELEVATION A**

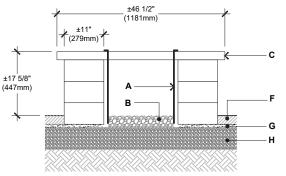


**ELEVATION B** 









**SECTION 1-1** 

- A. STEEL BOX INSERT
- CLEAN STONE 3/4" (20 mm), 4" (100 mm) THICK
- PIEDIMONTE CAP 14"X30" (CUT ON FIELD AS REQUIRED)
- D. SEMMA BLOCK (A OR B UNIT)
- SEMMA BLOCK (A OR B UNIT) CUT ON FIELD AS **REQUIRED**
- TECHO-BLOC PAVERS OR SLABS F.
- SETTING BED 1" (25 mm)
- COMPACTED GRANULAR 0- 3/4" (0-20 mm)
- SEMMA PILLAR UNIT (LEFT CORNER)
- SEMMA PILLAR (RIGHT CORNER)

#### **QUANTITY OF MATERIALS REQUIRED**

Piedimonte Cap (14"x30"): 6 Semma (A or B): 24

Semma Pillar: 12 (8 RIGHT CORNER, 4 LEFT CORNERS)

NOTE: Secure the blocks using a heat resistant concrete adhesive. The installer must ensure that the installation and use of the firepit comply with local regulations and code requirements.