

# Building Pillars

## DIFFERENT TYPES OF TANDEM PILLARS



This section discusses the different types of pillars which can be built using the Tandem system, namely:

- > Tandem pillars with steel pillar grids
- > Tandem pillars with structural units

Tandem Veneer units are used for the exterior facing of the pillar. The interior core of the column serves a structural function and can be built in accordance with one of the following two methods: using structural units (regular Tandem system) or using a steel pillar grid instead of structural units (Tandem pillar grid).

## TANDEM PILLARS WITH PILLAR GRIDS

This type of pillar is built with Lafitt and Melville Tandem Veneer units only. The building of this type of column begins with the use of a steel pillar grid which provides structural support for the veneer units. The units are fastened to the pillar grid using specially-designed connectors.

The essential details for building this type of pillar are described below.

### 90 mm LAFITT AND MELVILLE TANDEM COLUMN WITH PILLAR GRID ASSEMBLY

With this material you can construct one pillar of 670 x 670 mm - 26 3/8 x 26 3/8 in. to a maximum height of 1080 mm - 42 1/2 in.

One pillar requires the use of 2.6 m<sup>2</sup> - 28 ft<sup>2</sup> of veneer units.

One cube contains 10 pillar grids and 10 bags of 200 grid connectors.

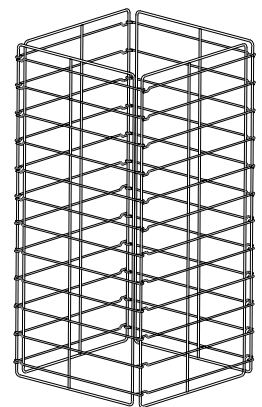
#### MATERIAL NEEDED:



GRID CONNECTORS  
Bag of 200 units

#### LAFITT or MELVILLE TANDEM veneer units:

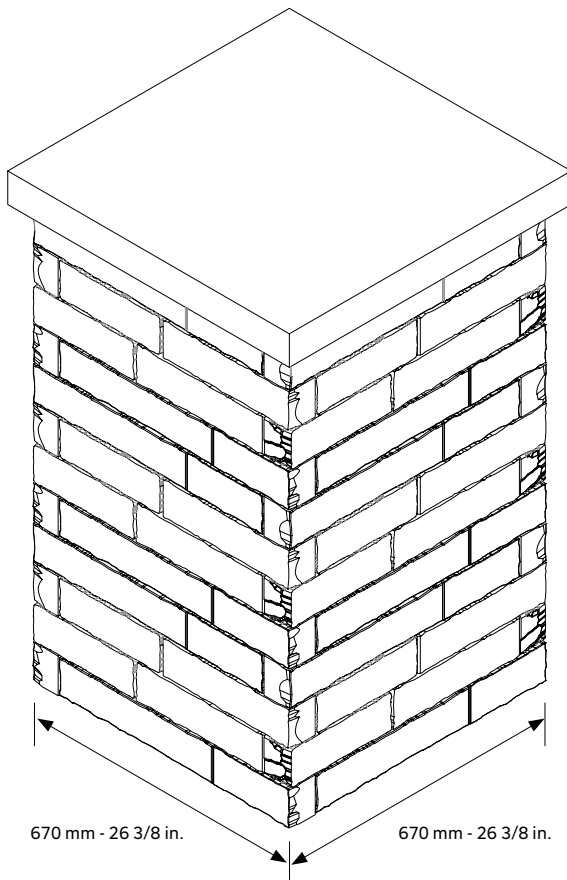
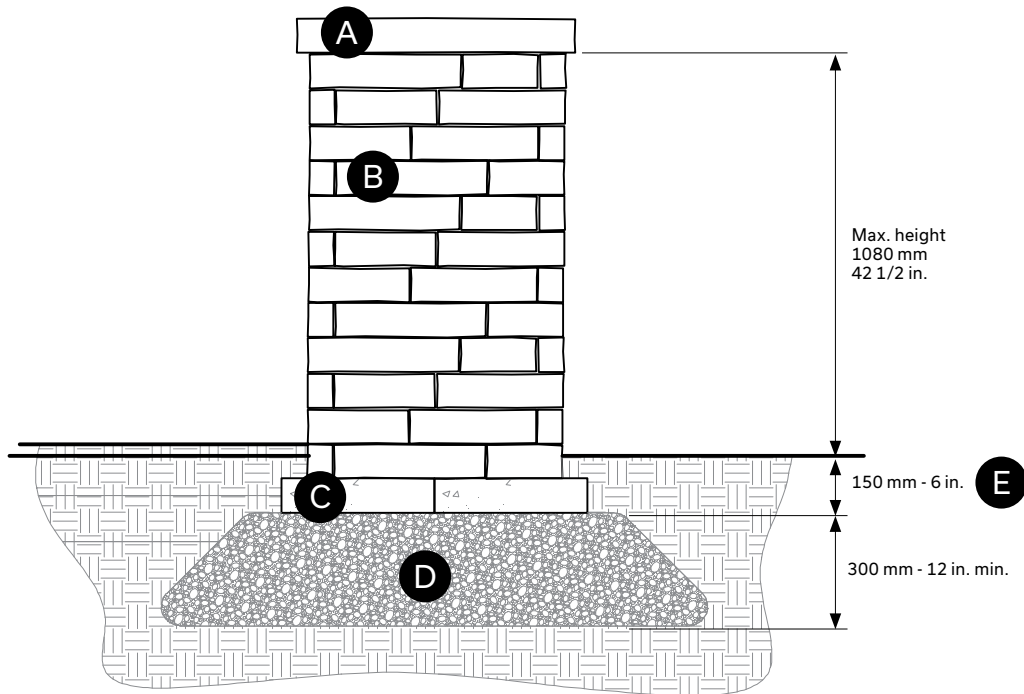
- > 48 regular units (12a, 12b, 12c, 12d)
- > 48 textured end corner units (12a, 12b, 12c, 12d)



TANDEM PILLAR GRID

NOTE: All Melville veneer units come with one textured end (corner units)

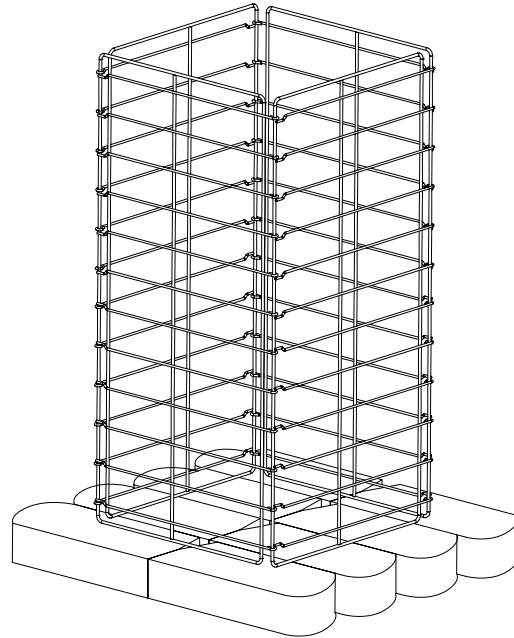
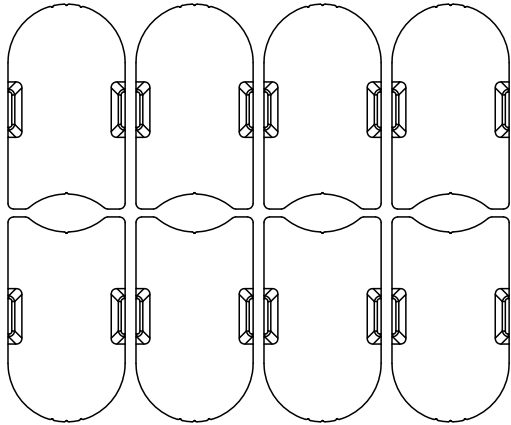
**CROSS-SECTION - LAFITT OR MELVILLE TANDEM PILLAR GRID**



- A** Natural stone pillar capping unit 29 x 29 in.
- B** 90 mm Lafitt or Melville Tandem veneer unit
- C** Starter unit 90 x 268 x 469 mm - 3 1/2 x 10 1/2 x 18 1/2 in.
- D** 0 to 20 mm - 0 to 3/4 in. compacted granular foundation, 300 mm - 12 in. minimum
- E** Minimum buried depth 150 mm - 6 in.

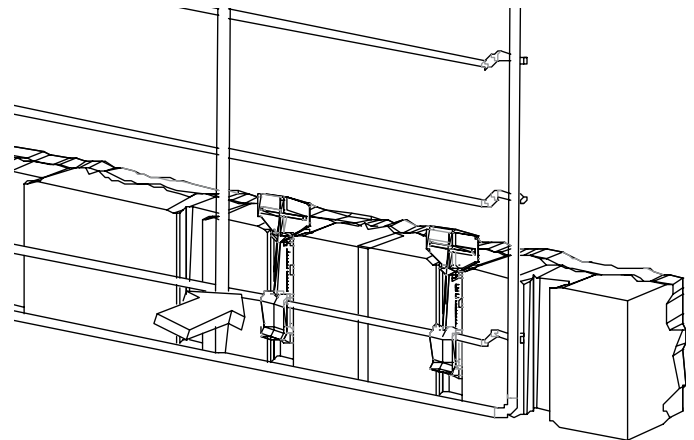
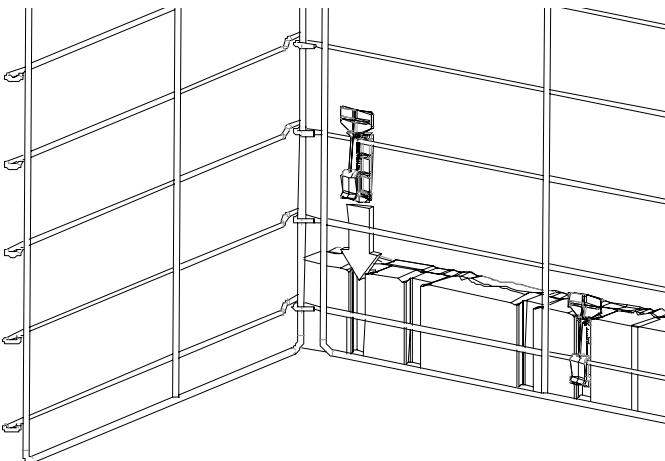
## LAFITT OR MELVILLE TANDEM PILLAR ASSEMBLY

Begin by placing a row (8 units) of starter units on a base of compacted crushed stone. Unfold the steel pillar grid and place it on the prepared surface.



1st ROW OF STARTER UNITS

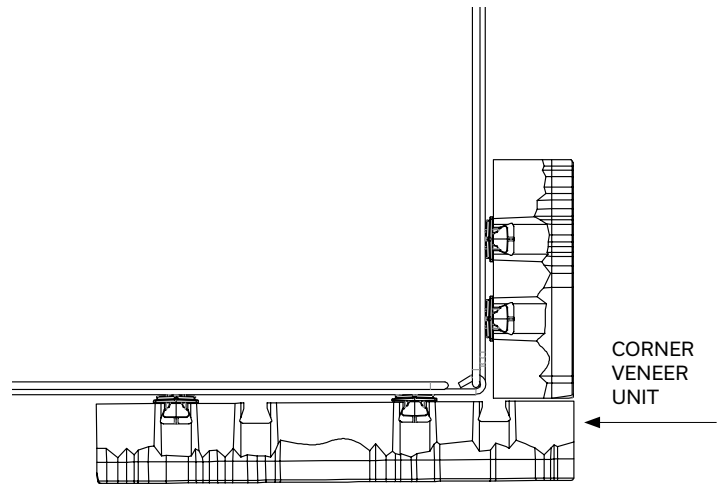
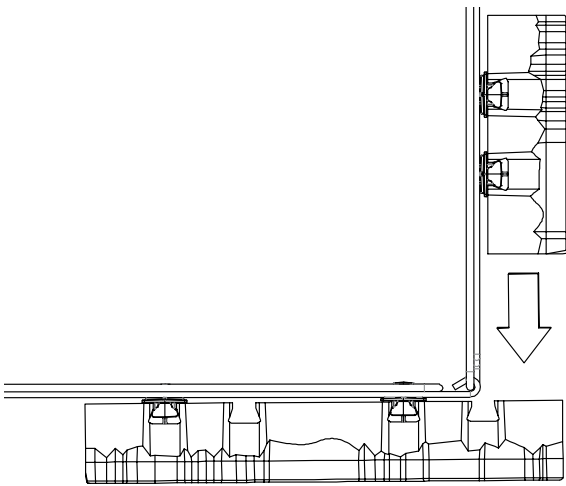
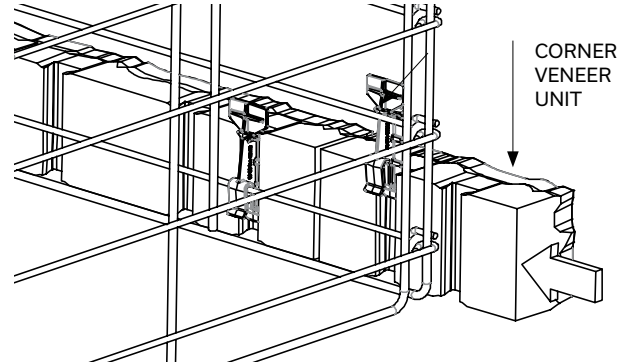
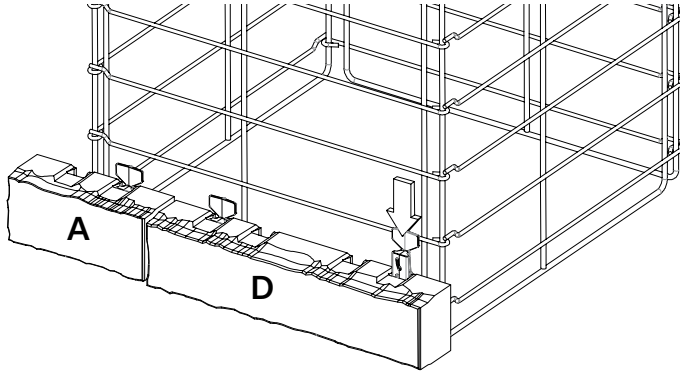
Insert the pillar connectors (using 2 connectors for each unit) into the veneer units which form the first row of the pillar. Place the veneer units for the first row around the steel pillar grid, making sure to "click" the connectors onto the horizontal wires (refer to the recommended installation pattern for the veneer units which have been selected).



# BUILDING PILLARS

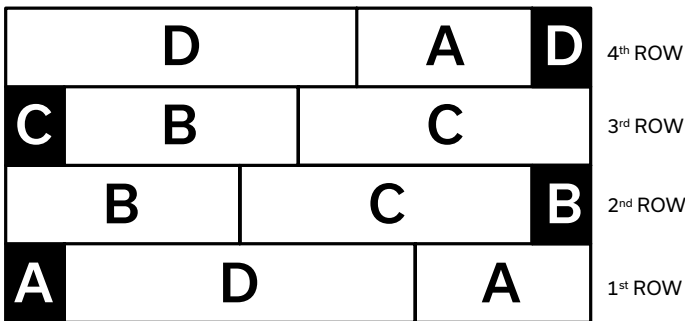
## LAFITT OR MELVILLE TANDEM PILLAR ASSEMBLY (CONT'D)

The corners of the pillar can be built easily by sliding the units along the wire until they line up with the corner unit which was installed previously.



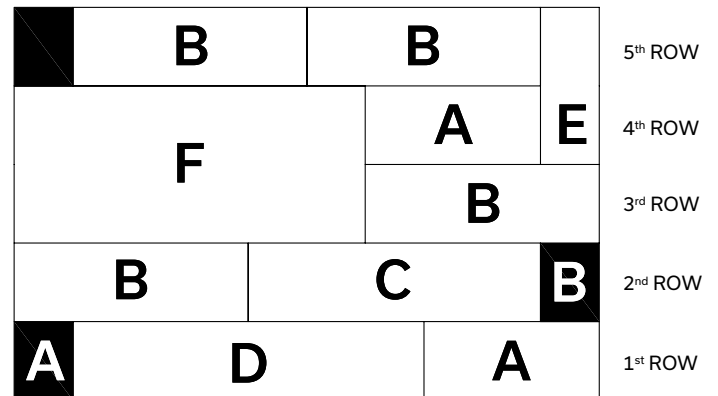
## LAYING PATTERNS

TANDEM PILLAR WITH 90 mm UNITS  
First 4 rows (over the starter units) 360 mm - 14 in.



Installation pattern to repeat up to DESIRED HEIGHT

90 mm TANDEM PILLAR WITH 180 mm UNITS  
First 5 rows (over the starter units) - for reference only

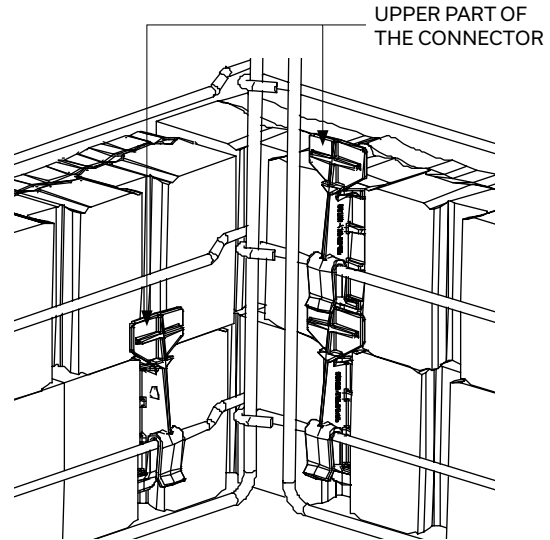
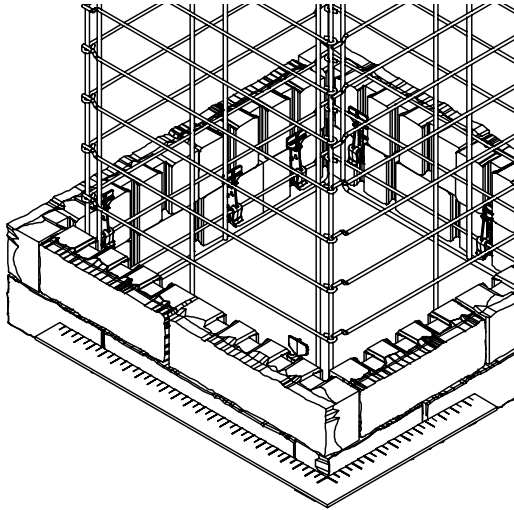


Installation pattern to repeat up to DESIRED HEIGHT

**LAFITT OR MELVILLE TANDEM 90 mm PILLAR ASSEMBLY**

Once the first row has been completed, fill the interior space with clean 20 mm aggregate, and then use a square to ensure that the corner units are perpendicular to each other. Repeat this step after every second row has been completed. Install subsequent rows in the same manner, up to the desired height.

Ensure that the upper part of each connector is firmly in place behind the veneer unit, since it will serve as a support for the unit which will be installed above it.

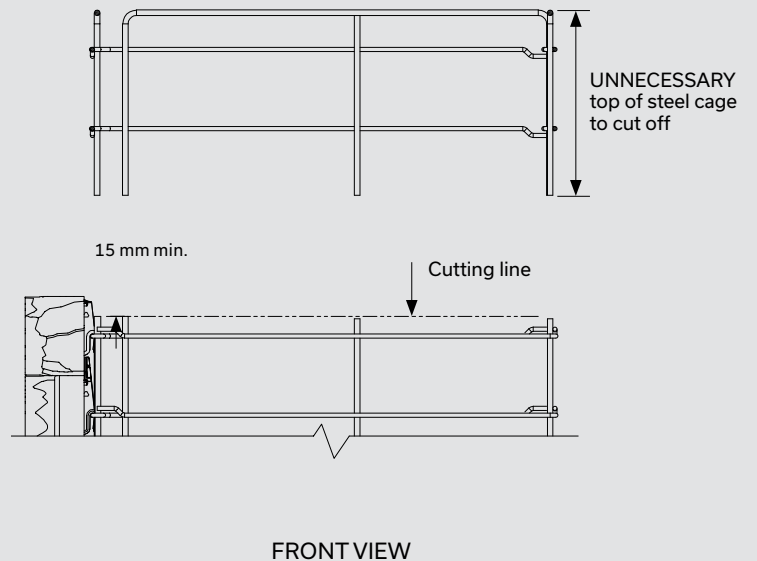
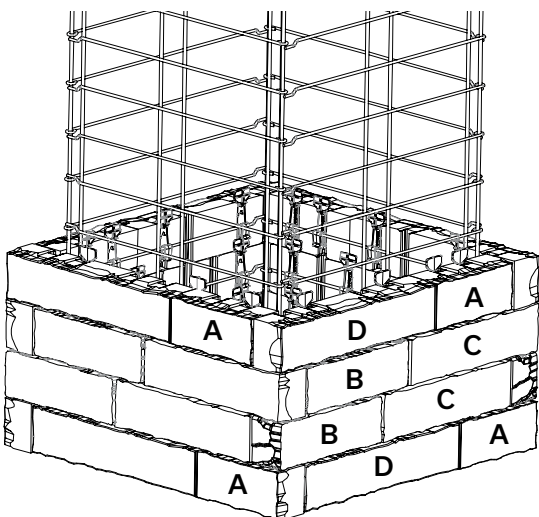


This is the recommended installation procedure for building the first four rows of a pillar. It makes optimal use of the veneer formats within a pallet: 16 regular veneers and 16 veneers with a texture end.

Repeating this pattern two more times will build a pillar with 12 rows and a height of 42 1/2 inches.

**CUTTING INSTRUCTION OF PILLAR GRID**

To build a pillar which is shorter than 1067 mm - 42 in., simply cut away the excess portion of the steel pillar grid with a grinder.

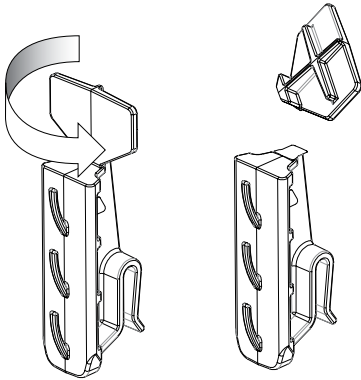
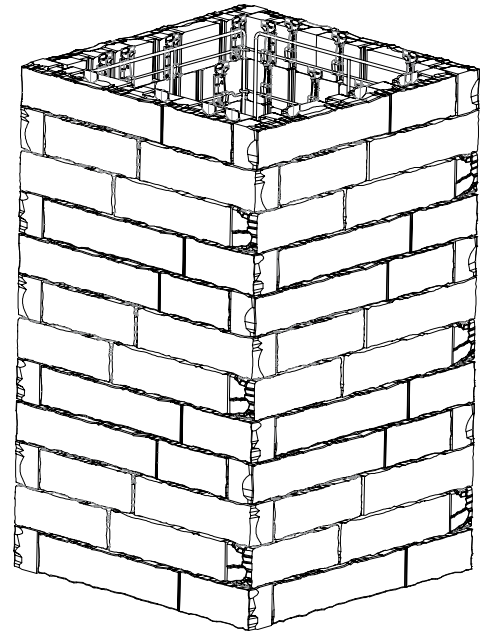


## BUILDING PILLARS

### LAFITT OR MELVILLE TANDEM 90 mm PILLAR ASSEMBLY (CONT'D)

A full steel pillar grid can be used to build a pillar with an overall height above ground, including the capping unit of 1067 mm - 42 in.

When the last row is reached, cut off the tops of the connectors with sheet-metal shears or twist them off by hand. Then install the capping unit on the pillar\*, adhering it in place with glue.

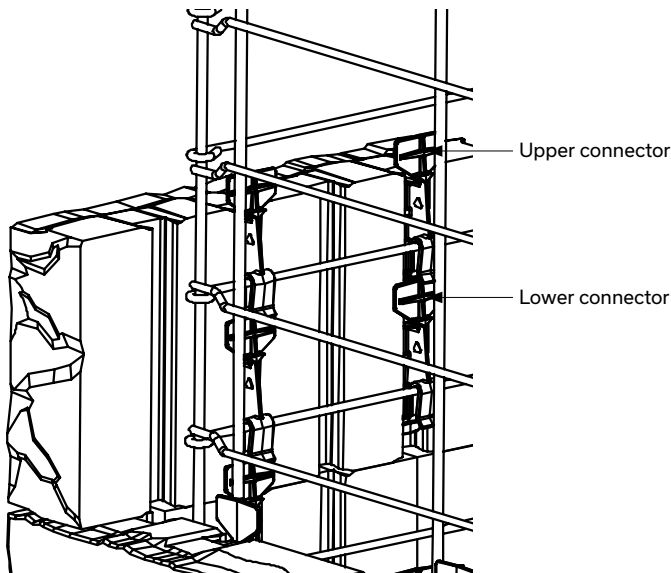


**\* VERY IMPORTANT:** the capping unit must rest on the veneer units and not on the steel pillar grid.

### LAFITT OR MELVILLE TANDEM PILLAR 90 mm AND 180 mm VENEER UNITS

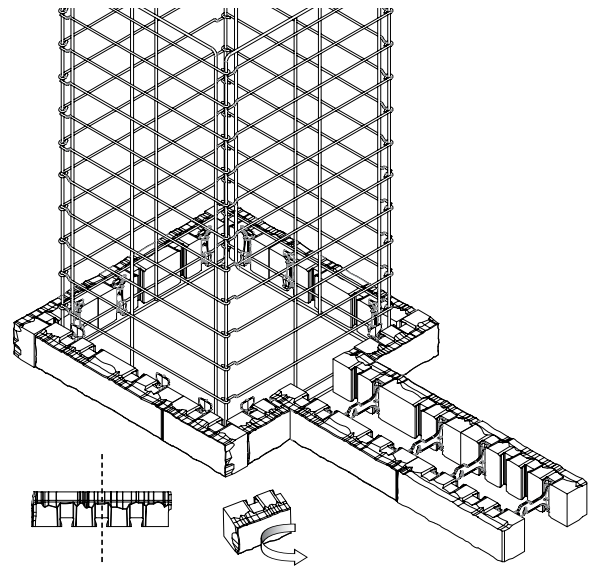
When using 180 mm high veneer units, use four connectors as shown below, beginning with the two lower ones and ending with the two upper ones.

To integrate 180 mm units into a pillar, use only 180 mm E and F units with textured corners. Carefully place the veneer units so that the joints are staggered, and ensure that you place at least one 180 mm unit on each side of the pillar, and not more than two.

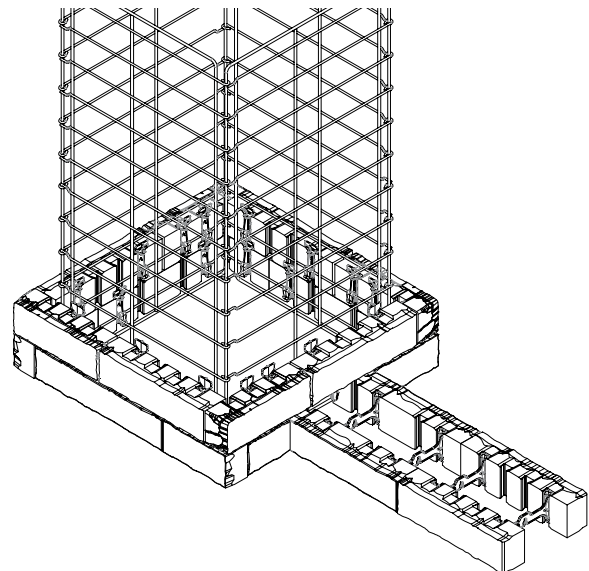


## JOINING A DOUBLE-SIDED WALL TO A PILLAR

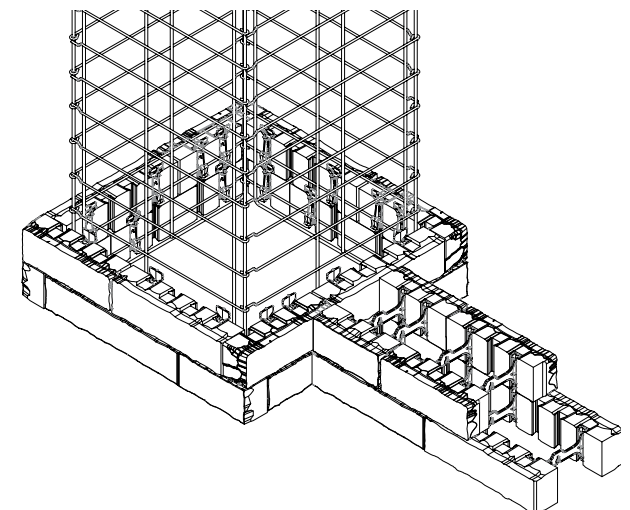
To join a double-sided wall to a pillar, you must cut the veneer unit for the pillar at every second row. Cut it at the centre of the dovetail recess.



For the second row, run the unit across the double-sided wall.



Begin the second row of the double-sided wall from the face of the pillar.



# BUILDING PILLARS

## LAFITT AND MELVILLE TANDEM PILLAR WITH STRUCTURAL UNITS

Two types of pillars can be built:

- > Lafitt Tandem
- > Melville Tandem

Pillars are built by placing Tandem units at 90° angles to create a square. Corners can then be completed by adding the appropriate textured veneer units. These veneers are attached using a corner connector as mentioned in the section on building a corner. It is advisable to glue each unit together for every course.

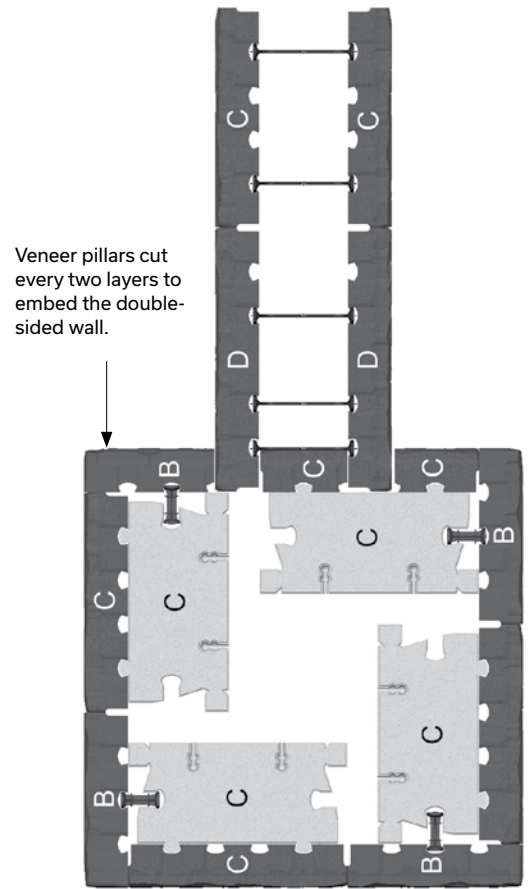
Maximum pillar height ranges from 1200 to 1500 mm - 4 to 5 ft. above ground level with a minimum buried depth of 150 mm - 6 ft. Capping is completed using a natural stone glue on last row. See table.

The predetermined installation patterns which are provided are intended to facilitate the building of each type of pillar. They also permit the optimal use of the different Tandem units and the textured veneer units.

In all cases, it is important to avoid aligning vertical joints from one row to the next on all visible facades. For these reasons, some combinations should be avoided from row to another.

Note that for some combinations, you need to use a structural unit A cut in two and fitted together with the veneer units.

When a double-sided wall ends at a pillar, the pillar must be modified to ensure it is solidly embedded, as in the illustration shown here.



Veneer pillars cut every two layers to embed the double-sided wall.

EXAMPLE OF EMBEDDING

90 PILLAR UNIT	MAXIMUM HEIGHT
670 x 670 mm 26 3/8 x 26 3/8 in.	1200 mm - 4 ft
737 x 737 mm 29 x 29 in.	1500 mm - 5 ft



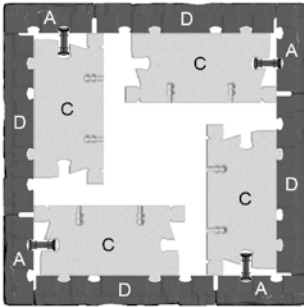
# BUILDING PILLARS

## LAFITT AND MELVILLE TANDEM PILLAR WITH 90 mm UNITS

### PILLAR

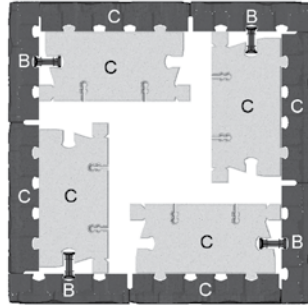
670 x 670 mm - 26 3/8 x 26 3/8 in.

1<sup>st</sup> ROW



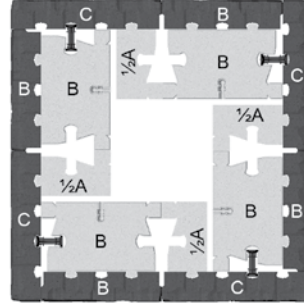
Veneer A with textured end

2<sup>nd</sup> ROW



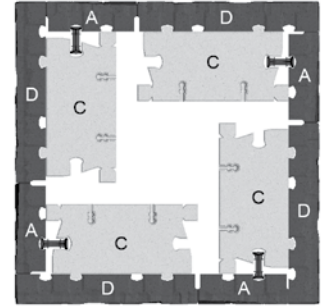
Veneer B with textured end

3<sup>rd</sup> ROW



Veneer C with textured end

4<sup>th</sup> ROW



Veneer D with textured end

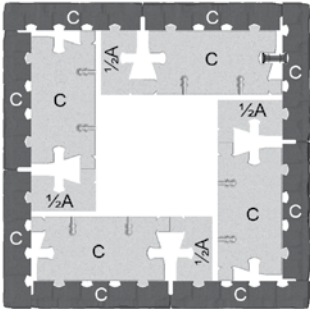
# BUILDING PILLARS

## LAFITT AND MELVILLE TANDEM PILLAR WITH 90 mm UNITS (CONT'D)

### PILLAR

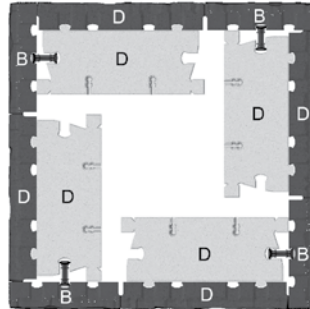
737 x 737 mm - 29 x 29 in.

1<sup>st</sup> ROW



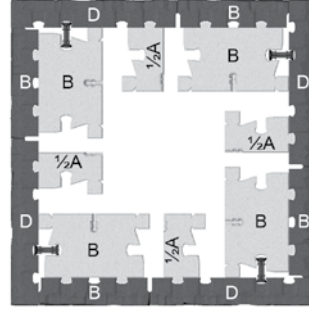
Veneer C with textured end

2<sup>nd</sup> ROW



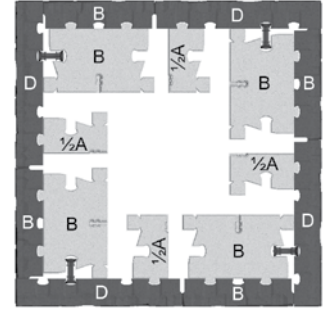
Veneer B with textured end

3<sup>rd</sup> ROW



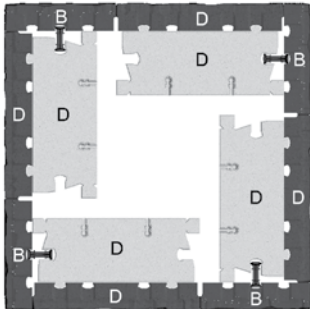
Veneer D with textured end

4<sup>th</sup> ROW



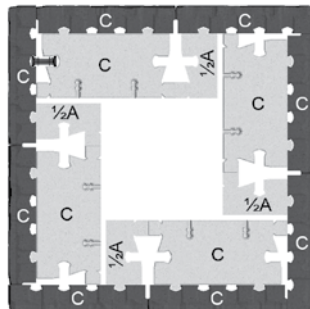
Veneer D with textured end

5<sup>th</sup> ROW



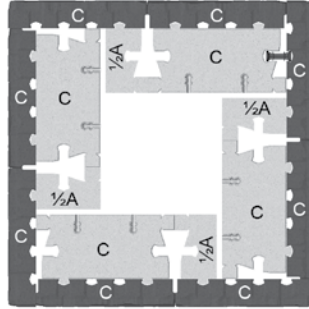
Veneer B with textured end

6<sup>th</sup> ROW



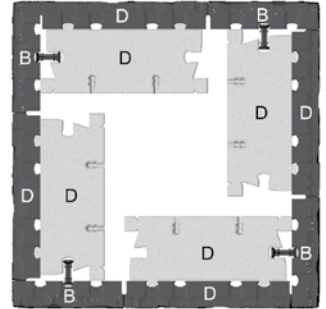
Veneer C with textured end

7<sup>th</sup> ROW



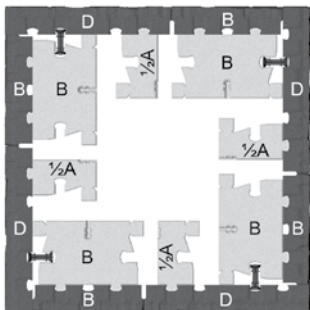
Veneer C with textured end

8<sup>th</sup> ROW



Veneer B with textured end

9<sup>th</sup> ROW



Veneer D with textured end

### LAYING PATTERN

TANDEM 90 mm PILLAR  
First 9 rows (over starter units)  
810 mm - 31 7/8 in.

#### LEGEND

- D** Veneer D with textured end
- C** Veneer C with textured end
- B** Veneer B with textured end
- A** Veneer A with textured end

Installation pattern to repeat up to  
DESIRED HEIGHT

<b>D</b>	<b>B</b>	<b>D</b>	9 <sup>th</sup> ROW
<b>B</b>	<b>D</b>	<b>B</b>	8 <sup>th</sup> ROW
<b>C</b>	<b>C</b>	<b>C</b>	7 <sup>th</sup> ROW
<b>C</b>	<b>C</b>	<b>C</b>	6 <sup>th</sup> ROW
<b>B</b>	<b>D</b>	<b>B</b>	5 <sup>th</sup> ROW
<b>D</b>	<b>B</b>	<b>D</b>	4 <sup>th</sup> ROW
<b>D</b>	<b>B</b>	<b>D</b>	3 <sup>rd</sup> ROW
<b>B</b>	<b>D</b>	<b>B</b>	2 <sup>nd</sup> ROW
<b>C</b>	<b>C</b>	<b>C</b>	1 <sup>st</sup> ROW