*Figure 1. Rebar placement for corners. Place rebar every 16" thereafter, or as required by design.*
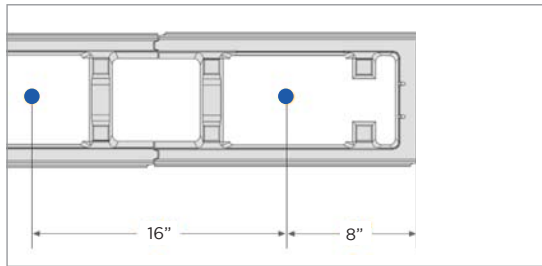


*Figure 2. Rebar placement for ends.*

**Dry Stacking:** Keep your block supply close to the wall for reduced downtime and easy installation.  The second course is important in establishing a comfortable spacing for both rows— one that will be easy to maintain for the full height of the wall. Begin at one corner and stack two courses of block at once, to make it easier to establish plumb. Where reinforcing is required, place rebars horizontally on the webs, or vertically down the cores.

Continue placing one course at a time, visually scanning the wall and checking for plumb and level often. Use a horizontal string line every 2-3 courses, and a framing square to check the corners.  If a block is not aligned, use a shim to correct minor variations. To reposition a block within a stacked portion of the wall, use a straight piece of wood and gently tap it into place.

Blocks should be laid in running bond such that cells are aligned vertically. This does two important things: 1) creates unobstructed vertical columns for unimpeded grout flow, insertion of vibrators, steel, electrical and plumbing; and 2) evens out height irregularities that might have occurred during manufacturing.

Do not position the closed end of one block against the closed end of another block, as grout may not fill properly in the space between, potentially allowing wind or moisture to enter through this location.

**Rebar Placement:** Fill the cores of the wall with rebar. As with any layout, vertical steel in the foundation will fall in the hollow cells of the block. See Figure 1 for rebar placement at corners of wall. See Figure 2 for rebar placement at end of walls. Rebar placement may change as required by the engineer.

**Grouting the Wall:** When grouting the wall or preparing for another lift, brush down the top of the wall with a stiff brush to remove any excess sand and gravel. Brace the end of the walls, openings, and wall sections where alignment is critical, as units may be subject to movement from external impact and grout pressure. The use of self-consolidating grout or a water reducer is recommended to minimize free water.

**Finishing Exterior Walls:** For exterior walls of buildings, perform one of the following to prevent moisture from wind-driven rain from entering: caulk all joints, bridge all joints using elastomeric paint, or plaster the wall.

# Tileco Mortarless Block

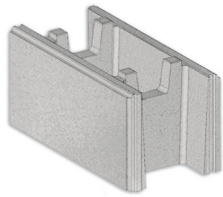**The simple, three-block**

**modular system designed to**

**be stacked without mortar**

◨◻ TILECO INC.

*Quality & Service since 1967*

# Tileco Mortarless Block: the simple, three-block modular system designed to be stacked without mortar.

## RUNNER

**SIZE:** 8" w x 8" h x 16" l
**WEIGHT:** 31.5 lbs.
**UNITS/PALLET:** 90
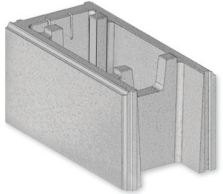
## END

**SIZE:** 8" w x 8" h x 16" l
**WEIGHT:** 33 lbs.
**UNITS/PALLET:** 90
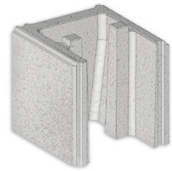
## HALF

**SIZE:** 8" w x 8" h x 8" l
**WEIGHT:** 16 lbs.
**UNITS/PALLET:** 180

The design flexiblility, attractiveness, and strength of a conventional concrete masonry unit— without the time-consuming labor

- **Meets ASTM C-90 specifications**

- **End & Runner units are a full 8" high, 8" wide and 16" long**

- **Stringent manufacturing tolerance of 1/32"**

Openings should be spaced a minimum of 24" apart to allow for a length of one and a half block.

- Check door and window frame measurements ahead of time.

- Make sure your headers are aligned and well shored to maintain position and alignment.

- To minimize masonry saw usage, select window sizes that fit your openings.

## Features

The Tileco Mortarless Block is a three-block "dry stack" system, which includes a runner block, end block and half block.

The unit's interlocking feature provides precision in positioning, eliminating the need for mortar between blocks and courses. Horizontal connections are achieved by a tongue and groove system. Self-aligning lugs facilitate vertical placement, mechanically locking each block into place during stacking.

Due to its versatility, this system has the ability to create finished ends, pilasters, corners and lintels. Common applications for the Tileco Mortarless Block system include basement walls, foundation walls, retaining walls, exterior above-grade walls, internal bearing walls and partitions.

## Benefits

- The "dry stack" feature allows the Tileco Mortarless Block to be laid much faster than standard CMU and reduces the need for skilled labor, resulting in lower labor costs.

- It is nondependent on weather making it ideal for year round installation and preventing project delays.

- The architectural score revealed between blocks gives it a clean aesthetic, mimicking the look of a mortar joint.

- Mortarless application eliminates building code cleanout requirements when solid grouted.

## Design & Planning

We recommend designing your Tileco Mortarless Block project with a combination of full and half blocks to minimize the cutting of block with a masonry saw.

## Installation

**Tools:**
- Dead blow hammer
- Level
- Mason's line
- Chalk line
- Trowel
- Masonry saw

**Footing:** The Tileco Mortarless Block system uses the same footing size as conventional block. Start by pouring a level concrete footing. If the footing is level and relatively smooth, the first course of blocks can be stacked directly on the concrete, without mortar. If footing is not level, it is necessary to lay the first course of block on a full bed of mortar.

**Setting the First Course:** Establish square and snap a chalk line on the footing as a guide. We recommend using line blocks and a tight line for the first course. It is critical to provide a plumb and level first course of block as unevenness will become more pronounced as additional courses are stacked.