

Specifications:

- Provide one-core, Open-End Ivany Block furnished by one of the valid Ivany Block franchise holders.
 - Bottom of block shall have a ½" lip and a protrusion of the lip in the middle of the core shall be provided to hold the vertical reinforcing in the proper position.
 - Webs of block shall have two vertical slots for proper placement of horizontal reinforcing, which holds the vertical reinforcement in the proper position.
- Provide special corner units to make the proper placement of the horizontal corner bars.
- Unit Compressive Strength: Provide units with a minimum average net-area compressive strength of 3,000 psi, conforming to ASTM C 90.
- Mortar: Type 'M' per the property specification of ASTM C270.
- Coarse Grout: Comply with ASTM C 476, with a minimum 28-day compressive of 3,000 psi and a slump of 8 to 10 inches. Compressive strength of grout shall be determined in accordance with ASTM C 1019.
- Reinforcement: Provide reinforcement meeting ASTM A 615, Grade 60.
- Compressive Strength of Masonry (f'_m) shall be determined by the unit strength method per Article 1.4 B.2 of TMS 602 for $f'_m = 2,400$ psi.
- Compressive Strength of Masonry (f'_m) shall be determined by prism test method per Article 1.4 B.3 of TMS 602 for $f'_m = 2,800$ psi. Prism tests shall be in accordance with ASTM C 1314.
- Walls shall be constructed in accordance with "Specification for Masonry Structures" TMS 602.
- Special inspections shall be as required by the building code and "Specification for Masonry Structures" TMS 602.

Recommended Basement Wall Reinforcing Tables Notes:

- Tables have been prepared based on “Building Code Requirements for Masonry Structures” TMS 402-16.
- See specifications for material strength and other requirements.
- Tables are based on at-rest earth pressures as listed, which corresponds to Lateral Soil Load Table 1610.1 of the International Building Code (IBC-2015) and Soil Classes and Design Lateral Soil Pressures indicated in Sections R404 and R405 of the International Residential Code (IRC-2018).
- Backfill shall be sloped away from the wall. The tables include an equivalent surcharge of one-foot of soil.
- Tables are prepared without consideration of hydrostatic pressure. Adequate drainage shall be provided to prohibit the any hydrostatic pressure.
- All reinforcement shall be continuous. Splices shall be in accordance with the building code or TMS 402.
- Follow the National Concrete Masonry Association (NCMA) TEK 10-3 “Control Joints for Concrete Masonry Walls – Alternative Engineered Method” for spacing of control joints.
- Recommended minimum reinforcement:
 - 8” Ivery Block #4 @ 32”o.c. Vertical and #3 @ 16”o.c. Horizontal
 - 12” Ivery Block #4 @ 24”o.c. Vertical and #4 @ 24”o.c. Horizontal
 - 16” Ivery Block #4 @ 16”o.c. Vertical and #4 @ 16”o.c. Horizontal
- Design depth of vertical reinforcement (d), measured from the outside face of Ivery Block:
 - 8” Ivery Block 5 1/8”
 - 12” Ivery Block 8 5/8”
 - 16” Ivery Block 12 3/8”
- Walls are designed to be supported at the top and bottom prior to backfilling.
- Shaded values indicate f'_m of 2,800 psi, see Specifications for prism testing.

Allowable Compression Strength Table Notes:

- Tables have been prepared based on “Building Code Requirements for Masonry Structures” TMS 402-16.
- See specifications for material strength and other requirements.
- Values provided are for pure compression including an eccentricity equal to 10% of the nominal wall thickness.
- Flexural stresses due to lateral loads (soil pressure / wind) have not been included in these tables.