



**SECTION 04 23 13
GLASS UNIT MASONRY – VETROPIENO SOLID GLASS BRICK**

PART 1 GENERAL

1.01 SUMMARY

SEVES has prepared this specification by using generally accepted and appropriate technical information. The information contained herein should not be solely relied upon but used as a guide for the design and specification of the intended application by the design professional within the appropriate discipline. SEVES has no control over the elements of design, installation and workmanship and therefore disclaims all liability arising from the use or misuse of the specification.

1.02 WORK INCLUDED

- A. SEVES Vetropieno Solid Glass Brick Units.
- B. Integral joint reinforcing.
- C. Mortar
- D. Sealers

1.03 RELATED WORK

- A. Steel Channels
- B. Sills, Lintels and Jamb Conditions
- C. Sealant
- D. Expansion and Packing Materials

1.04 REFERENCES

- A. ASTM E283, Air Leakage
- B. ASTM C144, Aggregate for Masonry.
- C. ASTM C150, Portland Cement.
- D. ASTM C207, Hydrated Lime for Masonry.
- E. ASTM C270, Mortar for Unit Masonry.
- F. ASTM E330, Uniform Wind Load Structural and Deflection
- G. ASTM E547, Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Cyclic Static Air Pressure Difference.
- G. ASTM A580, Stainless Steel Wire
- H. ASTM A167, Stainless Steel Perforated Panel Anchors
- I. ASTM D1187, Type II Asphalt Emulsion for Metal Surfaces
- J. ASTM D1227, Type III Asphalt Emulsion for Porous Surfaces
- K. NFPA 257, Fire Test for Glass Block Window Assemblies. (Equivalent to UL 9)
- L. ASTM E331, Water Penetration
- M. ASTM C920, Standard Specification for Elastomeric Joint Sealants.

1.05 SUBMITTALS

- A. Product Data: Submit two (2) copies of SEVES Glass Block North American Design Guide.
- B. Samples: Submit two (2) SEVES Glass Blocks of each type, size and pattern for approval.

1.06 ENVIRONMENTAL REQUIREMENTS

- A. Maintain materials and ambient air temperatures to a minimum of 40° F prior to, during and 48 hours after the completion of work.
- B. Protect SEVES Glass Blocks from moisture prior to construction.

1.07 WARRANTY

A. Seves offers a limited 5 year warranty on glass block products

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Seves Glass Block Inc.
10576 Broadview Rd, Cleveland, Ohio 44147
440-627-6257 or 877-SEVES11 (877-738-3711)
www.sevesglassblockinc.com inquiry@sevesglassblock.com

2.02 GLASS UNITS

- A. Vetropieno: Americano Glass Brick 3.625" X 2.25" X 7.625" or
Americano Quadrato Glass Brick 3.625" X 2.25" X 3.75"
- B. Vetropieno Glass Brick, Rettangolare: 4.60" X 2.125" X 9.45"
or Quadrato: 4.625" X 2.125" X 4.725"
- C. 90 Minute Fire rating meeting NFPA 257.
- D. Vetropieno Color Options: Neutro, Nordica, Siena and Blue
- E. Vetropieno Americano available in Neutro Only.

2.03 ACCESSORIES

- A. Joint Reinforcing: Ladder type, stainless steel, 2-9 gauge parallel longitudinal wire at 1 5/8" on center and cross-rods welded at 12" on center.
- B. Panel Anchors: 20 gauge X 1-3/4" X 16" stainless steel with staggered perforations.
- C. Perimeter Chase: Masonry recess, 1/4" steel channel or angles.
- D. Asphalt Emulsion: Karnak 220 A/F or equal.
- E. Expansion Strips: 3/8" X 4" open cell polyethylene foam or glass fiber.
- F. Sealant: 3M™ Fire Barrier Water Tight Sealant 3000wt. or Commercial-grade Silicone Sealant
- G. Backer Rod: As recommended by sealant supplier
- H. External type water proofer: water-based silicone sealer by BASF Corporation Enviroseal 40 or approved equal.

2.04 MORTAR MATERIALS

- A. Shall be prepared according to ASTM C270 for Type S Mortar. Mortar to have 1 part Portland Cement (Type 1), 1/2 part lime and 2-1/2 to 3 parts of fine sand passing No. 20 sieve and free of iron compounds to avoid stains.
Use White Portland Cement and silica sand for white joints.
Mix mortar drier than normal and only an amount that will be used in 1/2 to 1 hour.
Glass block will not absorb water the same as brick. Do not use re-tempered mortar.
Do not use antifreeze compounds or accelerators.
- B. Add _____ mortar color per manufacturer's instructions.
- C. A water-based acrylic bonding agent can be added with potable water or approved equal to increase waterproofing qualities of mortar and bond strength.

PART 3 EXECUTION

3.01 PREPARATION

- A. Verify that pocket recesses or chases provided under other section are accurately located and sized.
- B. Establish and protect lines, levels and coursing.

3.02 INSTALLATION

- A. Arrange coursing pattern to provide consistent joint work throughout.
- B. Locate and secure perimeter metal chase if required.
- C. Coat sill under units with asphalt emulsion as a bond breaker.
- D. Mortar joints must be solid. Furrowing is not permitted. Neatly tool surface to a concave joint.
- E. Place Panel Reinforcing and Panel Anchors in horizontal joints above 1st course of brick, every 4th course thereafter and under the last course.
- F. Isolate panel from adjacent construction on sides and top with expansion strips. Keep expansion joint voids clear of mortar. Minimum 3/4" thickness for 90 minute assemblies.
- G. Maintain uniform joint width of 3/8" ± 1/16".
- H. Maximum variation from plane of unit to the next unit - 1/16".

- I. Maximum variation of panel from plane - 1/8".
- J. Do not use retempered mortar.
- K. Do not tap glass block with steel tools.
- L. When mortar has set, pack backer rod in jamb and head channels. Recess to allow for sealant.
- M. Apply Fire Proof Sealant if rated assembly.

3.03 CLEANING

- A. Remove excess mortar from glass surfaces with a damp cloth before set occurs.
- B. Strike and tool joints as required for proper sealing. Joints should be smooth and not "sandy"
- C. Number 4(0000) steel wool can be used to remove remaining mortar and dried film

3.04 External sealer

- A. Apply External Type Waterproofer: Water based silane sealer type by Sonneborn Building Products (HYDROZO ENVIROSEAL™ 40, 1-800-243-6739).

END OF SECTION 04 23 13