BILCO PermEntry® Basement Entrance

Product Specifications

Basement Entrance Unit shall be Type _____ as manufactured by Authorized PermEntry Dealer operating under license from The PermEntry Company. Basement Entrance Unit shall consist of a monolithic precast concrete stairwell including steps and protected from weather by a double leaf steel basement door manufactured by The BILCO Company.

Precast concrete stairwell component shall be as cast in licensed production forms of The PermEntry Company. Concrete shall be air entrained meeting the standards of ACI 322-722, consolidated by vibration, and cured to minimum of 3500 PSI. Four 1/2" x 12" coil threaded flared tyloop anchors of .340 wire (100,000 PSI) designed with 4:1 safety factor minimum as engineered by The PermEntry Company shall be precast into the concrete stairwell as prepared sleeves for securing stairwell to the foundation wall.

Anchoring hardware for the stairwell shall be four 1/2" diameter coil threaded high tensile steel lag studs as engineered by The PermEntry Company, the length sized to the thickness of the foundation wall, with accompanying 1/2" diameter heavy hex lag nuts. Bearing shall be safely provided by four 2 1/4" x 9/16" x 3/16" hot rolled steel washers. Opening in the foundation wall must not exceed 40" in width; stairwell shall be centered on opening.

Anchored stairwell shall safely withstand a dead load of 145 pounds per cubic foot of concrete plus a uniform live load of 100 pounds per square foot over the entire tread area, 300 pounds per square foot at center of any tread, and active earth pressure of 50 pounds per square foot per foot of depth. Anchored stairwell, designed for an 8" thick minimum unreinforced concrete
wall (1500 PSI) or 8" thick minimum concrete block wall, shall be a self-sufficient structure not requiring support from undisturbed earth or fill placed beneath the stairwell.

Stairwell shall be marked for identification with the registered trademark of The PermEntry Company. Basement Door component shall be marked to identify that the stairwell and door are the subject of BOCA EVALUATION SERVICES, INC. RESEARCH REPORT NO. 92-2. Stairwell exterior joint sealant shall be pre-formed continuous butyl resin sealant, conforming to Federal Specification SS-S-210A, 1/2" minimum in any cross-sectional dimension. Sealant shall be applied in a single band to the faces of the stairwell where it will about the foundation wall and footing.

Stairwell interior joint sealant shall be a non-shrinking grout consisting of 60% Portland cement and 40% metallic waterproofing mixed with water to a mortar consistency, or in the alternative hydraulic cement equal to Thoro "water plug". Grout shall be applied to fill the interior joints where the stairwell abuts the foundation wall and footing.

Basement Door component shall be .090"-.100 steel with Torsion Cam Lift System. Basement Door (and extension, if specified) shall be flow-coated and baked on factory prime finish and shall be furnished complete with hardware assembly bolts and anchors for securing to masonry. The door shall be marked for identification with the registered trademark of The PermEntry Company.

The basement door shall be sealed to the stairwell using butyl rubber base caulking meeting Federal Specification FS-TT-S-1543A or FS-TT-S-1657. Painting contractor shall apply a finish coat of ________ (color) alkyd enamel after door installation. PermEntry Basement Entrance shall be completely installed and sealed by trained installer of an Authorized PermEntry Dealer.