



SECTION 107446

Window Wells

*Copyright 2017 The Tapco Group - All rights reserved*

**\*\* NOTE TO SPECIFIER \*\* Wellcraft Egress Systems - The Tapco Group; Egress window systems that meet egress code requirements**

**This section is based on the products of Wellcraft Egress Systems - The Tapco Group, which is located at:**

**29797 Beck Rd.  
Wixom, MI 48398-2834  
Toll Free Tel: 888-812-9545  
Tel: 888-812-9545  
Email: [Wayne\\_sanderson@tapcoinc.com](mailto:Wayne_sanderson@tapcoinc.com)  
Web [www.wellcraftwells.com](http://www.wellcraftwells.com)**

**Only Wellcraft Egress Systems meets egress code with style, superior quality and reliability. Building from a foundation of safety, our versatile range of code-compliant basement fire escape systems does more than the critical requirement of allowing fast, safe passage for families and firefighter-rescuers. Our well systems feature windows, integrated stepladders and well covers that are easy to use, so that even young children can escape danger.**

## PART 1 GENERAL

### 1.1 SECTION INCLUDES

- A. Window well for below-grade egress.

### 1.2 RELATED SECTIONS

**\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.**

- A. Section 038100 – Concrete Cutting.
- B. Section 080605 – Window Schedule.
- C. Section 100670 – Schedule for Exterior Specialties.
- D. Section 107443 – Below-Grade Egress Assemblies.
- E. Section 221426 – Facility Storm Drains.
- F. Section 310000 – Earthwork.

### 1.3 REFERENCES

**\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.**

- A. International Residential Code (IRC) 2012 – Section R310
- B.

#### 1.4 SUBMITTALS

A. Submit under provisions of Section 01300.

B. Shop Drawings: Show materials, layout, dimensions, profiles, fasteners and anchors, hardware, finishes, and interface with adjacent construction.

C. Product Data: Manufacturer's data sheets on each product to be used, including:

D.

1. Preparation instructions and recommendations.
2. Storage and handling requirements and recommendations.
3. Installation methods.

**\*\* NOTE TO SPECIFIER \*\* Delete selection samples if colors have already been selected.**

D. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's standard colors.

#### 1.5 QUALITY ASSURANCE

A. ASTM D 638: Standard Test Method for Tensile Properties of Plastics.

B. ASTM D 648: Standard Test Method for Deflection Temperature of Plastics Under Flexural Load in the Edgewise Position.

C. ASTM D 790: Standard Test Method for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.

D. ASTM D 792: Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement.

E. ASTM D 1238: Standard Test Method for Melt Flow Rates of Thermoplastics by Extrusion Plastometer.

F. ASTM D 1693: Standard Test Method for Environmental Stress Cracking of Ethylene Plastics.

G. ASTM D 4976: Standard Specification for Polyethylene Plastics Molding and Extrusion Materials.

#### 1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to site in manufacturer's original, unopened packaging, with labels clearly identifying product name and manufacturer.

B. Store products in manufacturer's unopened packaging until ready for installation.

C. Protect materials during handling and installation to prevent damage.

#### 1.7 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

## 1.8 WARRANTY

- A. Provide with a limited lifetime warranty against manufacturer's defects relating to wells.

Provide with a seven year warranty against manufacturer's defects relating to well covers.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Wellcraft Egress Systems - The Tapco Group, which is located at: 29797 Beck Rd.; Wixom, MI 48398-2834; Toll Free Tel: 888-812-9545; Tel: 888-812-9545; Email: [Wayne\\_sanderson@tapcoint.com](mailto:Wayne_sanderson@tapcoint.com) Web: [www.thetapcogroup.com/brands/wellcraft](http://www.thetapcogroup.com/brands/wellcraft)

**\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.**

- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

**\*\* NOTE TO SPECIFIER \*\* The following options represent the types of window wells that are available from Wellcraft Egress Systems. Wells are available in four options. Delete products or options that are not required. If more than one window well is required, be sure to indicate where each is to be used, either by specifying the location(s) for each or by giving each a unique name that can be referenced on the Drawings.**

### 2.2 WINDOW WELLS

- A. Physical Properties:
  - 1. Constructed from durable Polyethylene.
  - 2. UV inhibitors – superior weathering resistance.
  - 3. Material resists impacts and abrasions, rusting, cracking, and fading.
- B. Model 2060: Single unit egress window well. This unit is designed for use with up to 48 inch (1219 mm) wide egress windows. One piece construction.
  - 1. Color:
    - a. Granite Grey (Model: 020600190).
    - b. Sandstone (Model: 020600191).

**\*\* NOTE TO SPECIFIER \*\* Model 2060 can accommodate 12 inch (305 mm) high extensions which will increase the total height from 60 inches (1524 mm) to 72 inches (1829 mm) or 84 inches (2134 mm). The unit will accommodate a maximum of 2 extensions. Delete if no extension is required.**

- 2. Optional Extension:
  - a. One 12 inch (305 mm) extension.
  - b. Two 12 inch (305 mm) extensions.

**\*\* NOTE TO SPECIFIER \*\* Model 2060 is a single unit which has a standard width and depth. Height may vary from 60 inches (1524 mm), 72 inches (1829 mm), and 80 inches (2134 mm) depending on the use of height extensions. Delete heights not required.**

3. Height:
  - a. 60 inches (1524 mm).
  - b. 72 inches (1829 mm).
  - c. 84 inches (2134 mm).
4. Width:
  - a. 78 inches (1981 mm): at widest point of wall attachment.
5. Depth:
  - a. 30 inches (762 mm): from exterior wall to stepladder.

**\*\* NOTE TO SPECIFIER \*\* Model 2060 has two covers available. Each cover is can safely hold up to 500 lbs (227 kg) and is designed for easy emergency escape. Delete cover not required or delete section if no cover is required.**

6. Well Cover:
  - a. 2060 Polycarbonate Cover (Model: 020600900).

**\*\*NOTE TO SPECIFIER\*\* Model 2062 Needs additional spacers to make code compliant please delete if local Egress code will not allow for additional installation requirements Contact Manufacturer for special requirements**

- C. Model 2062: Single unit egress window well. This unit is designed for use with 36 inch (914 mm) wide casement egress windows. One piece construction.
  1. Color:
    - a. Granite Grey (Model: 020620190).
    - b. Sandstone (Model: 020620191).
  2. Height:
    - a. 62 inches (1575 mm).
  3. Width:
    - a. 49 inches (1245 mm): at widest point of wall attachment.
  4. Depth:
    - a. 37.5 inches (953 mm): from exterior wall to stepladder.

**\*\* NOTE TO SPECIFIER \*\* Model 2062 has one cover available. The cover can safely hold up to 500 lbs (227 kg) and is designed for easy emergency escape. Delete if not required. Needs additional spacers to make code compliant**

5. Well Cover:
  - a. 2062 Polycarbonate Cover (Model: 020620902).

- D. Model 5600: Modular unit egress window well. This unit is designed for use with 48 inch (1219 mm) wide egress windows. Modular construction.
  1. Color:
    - a. Grey (Model: 056100092)
  2. Height:

**\*\* NOTE TO SPECIFIER \*\* Height will be determined by the number of modular units required to reach the required height. The top modular unit will have a height of 20.875 inches (530 mm) with all subsequent modular units having a height of 14 inches (356 mm). Delete heights not required.**

- a. One section: 20.875 inches (530 mm).
- b. Two sections: 34.875 inches (886 mm).
- c. Three sections: 48.875 inches (1241 mm).
- d. Four sections: 62.875 inches (1597 mm).
- e. Five sections: 76.875 inches (1953 mm).

**\*\* NOTE TO SPECIFIER \*\* Input height requirement below if more than five sections are required.**

- f. \_\_\_\_ sections: \_\_\_\_ .875 inches (\_\_\_\_ mm).
- 3. Width:
  - a. 61 inches (1549 mm): at widest point of wall attachment.
- 4. Depth:
  - a. 37.5 inches (953 mm): from exterior wall to stepladder.
- 5. Well Cover:

**\*\* NOTE TO SPECIFIER \*\* Model 5600 has two covers available. Each cover can safely hold up to 500 lbs (227 kg) and is designed for easy emergency escape. Delete cover not required or delete section if no cover is required.**

- a. 5600 Polycarbonate Cover (Model: 056000900).
- b.

**\*\* NOTE TO SPECIFIER \*\* A Polycarbonate Dome cover is recommended when the top of the window is higher than the well.**

- b. 5600 Polycarbonate Dome Cover (Model: 056000918).

E. Model 6700: Modular three tiered unit egress window well. This unit is designed for use with 60 inch (1524 mm) wide egress windows. This three tiered terrace design takes the place of a stepladder, allowing for quick and easy egress. Three piece modular construction.

- 1. Color:
  - a. Granite Grey (Model: 067000390).
  - b. Sandstone (Model: 067000391).
- 2. Height:
  - a. 60 inches (1524 mm).
- 3. Width:
  - a. 76.5 inches (1943 mm): at widest point of wall attachment.
- 4. Depth:
  - a. 36 inches (914 mm) from exterior wall to stepladder.

**\*\* NOTE TO SPECIFIER \*\* Model 6700 has one cover available. The cover can safely hold up to 500 lbs (227 kg) and is designed for easy emergency escape. Delete if not required.**

- 5. Well Cover:
  - a. 6700 Polycarbonate Cover (Model: 067000902).

## 2.3 ACCESSORIES

**\*\* NOTE TO SPECIFIER \*\* The following windows are available from Wellcraft Egress Systems. Each window is constructed from low maintenance vinyl. Each window is poly-wrapped and braced for poured wall installation. Sash is removable for easy cleaning. Header, jamb, and sill parts snap-in and can be reversed if installed incorrectly. Delete if not required.**

- A. Egress Compliant Windows:

1. In-Swing Egress (Model: WISE2745):
  - a. Frame Dimensions: 27 inches (686 mm) by 45 inches (1143 mm).
  - b. Net Clear Opening – when sash is opened in the normal inward position: 20.125 inches (511 mm) by 40.875 inches (1038 mm).
  - c. Net Clear Glass Opening: 20.375 inches (518 mm) by 38.375 inches (975 mm).
2. Acrylic Block Egress (Model: WAB2947):
  - a. Frame Dimensions: 29.25 inches (743 mm) by 47.25 inches (1200 mm).
  - b. 6 inch (152 mm) block configuration: 4 inches (102 mm) by 7 inches (178 mm).
  - c. Net Clear Glass Opening: 22.625 inches (575 mm) by 40.625 inches (1032 mm).
3. Egress Slider (Model: WFWS4848):
  - a. Frame Dimensions: 48 inches (1219 mm) by 48 inches (1219 mm).
  - b. Net Clear Glass Opening: 21.563 inches (548 mm) by 42.188 inches (1072 mm).

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- C. Commencement of work will imply acceptance of substrate.

### 3.2 PREPARATION

- A. Verify location of underground utilities prior to start of excavation.
- B. Clean surfaces thoroughly prior to installation.
- C. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

### 3.3 INSTALLATION

- A. Consult manufacturer installation instructions for specific well being installed.
- B. Gutters, down spouts, faucets on exterior walls, sprinkler heads, and sump pumps must be at least ten feet away from the window well. All water should be directed away from the well.
- C. Digging:
  1. Mark a centerline on the foundation above the window.
  2. Excavate equally on each side of window opening and large enough to accommodate the well and working area.

**\*\* NOTE TO SPECIFIER \*\* Window wells can be connected to the perimeter (foundation) drain system. The following two paragraphs detail drain installation. Delete if no drain system is to be installed.**

3. The hole should be dug deep enough to tie into the perimeter (foundation) drain system.
4. Connect the window well drain system to the perimeter (foundation) drain system to provide adequate drainage of any water that may enter the window well.
  - a. Drain pipes must be a minimum of 6 inches (152 mm) in diameter and capped such that stones or dirt cannot enter the drain system but water can enter easily (window well drain system not supplied).

5. Fill the bottom of the hole with pea stone, sand, or crushed lime stone and level to maintain a minimum of 4 inches (102 mm) below the window sill. This will be the bottom of the well.

**\*\*NOTE TO SPECIFIER\*\* Model 2062 Needs additional spacers to make code compliant please delete if local Egress code will not allow for additional installation requirements Contact Manufacturer for special requirements**

D. Mounting:

1. Install window well so that top edge of well is even with the top edge of window and does not interfere with window operation. Note: Well should be at least 3 inches (76 mm) above final grade. Final grade should slope a minimum of 1 inch (25 mm) per foot away from structure.
2. The foundation must be flat and clean of all debris to assure a proper fit of the well flange to the structure.
3. Position the well against the foundation wall.
  - a. Center window well relative to window and level. Ensure top edge of well is even with top edge of window.
  - b.
    - b. The top outside edges of well must maintain the exact width specified by the manufacturer for specific model used.
    - c. Mark the foundation through the pre-drilled holes on the mounting flanges.
    - d. Pre-drill fastener holes in foundation. Drill holes with a large enough diameter to accommodate the fastener.
4. Install fasteners in pre-marked drill areas on the well flanges. Note: For poured concrete foundations, install 3/8 inch (10 mm) wedge anchors. For block foundations, install 3/8 inch (10 mm) sleeve anchors. Length of fastener will depend on which well being installed. Consult specific well installation instructions for fastener length. Install 1 inch (25 mm) washers on each fastener prior to fastener placement. Do not use powder-activated fasteners.
  - a. Seal the outside and inside of the flange area touching the foundation with a professional grade of silicone caulk (not included)

E. Backfill:

1. Pea stone, sand, or crushed lime stone shall be used to backfill around the exterior of the well. The backfilling shall be done by hand and evenly distributed as the filling occurs. Pea stone, sand, or crushed lime stone will allow the excess water against the exterior of the well to drain away easily to the perimeter drain system that was installed along the foundation. The top 6 inches (152 mm) can be backfilled with top soil to support desired vegetation.

- F. Cover bottom of well with pea stone, sand, or crushed lime stone.

### 3.4 CLEANING

- A. Use a soft cloth or soft bristle brush with water and a mild detergent to clean the inside of the window well.

3.5 PROTECTION

- A. Protect installed products from damage by weather and other work until Date of Substantial Completion.
- B. Do not allow heavy equipment within ten feet of window well perimeter.

END OF SECTION