

Product Guide Specification – October 27, 2014

Specifier Notes: This product guide specification is written according to the Construction Specifications Institute (CSI) 3-Part Format. The section must be carefully reviewed and edited by the Architect to meet the requirements of the project and local building code. Coordinate this section with other specification sections and the drawings. Delete all "Specifier Notes" when editing this section. Again, this is a generic specification guide, it must be tailored for a specific project.

SECTION 8800 General Glazing – Glass Floor – Walkable Skylight

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Glass Flooring
- B. Purpose – specification covers the glass and frame requirements to separate an exterior space from a conditioned interior space.

1.2 RELATED SECTIONS

Specifier Notes: Edit the following list of related sections as required for the project. List other sections with work directly related to this section.

- A. Section 8800 – General Glazing.

1.3 REFERENCES

- A. ASTM C1048, standard specification for heat treated glass-kind HS, kind FT coated and uncoated
- B. ASTM C1172-91, standard application for laminated architectural flat glass .
- C. ASTM C1036, Type 1-transparent, quality Q3-glazing select quality
- D. ASCE Tab 4.1 and IBC, Table 1607.1
- E. ASTM 2751-11, Standard Practice for the Design and Performance of Supported Glass Walkways.
- F. ANSI B101.3, "Test Method for Measuring Wet DCOF of Common Hard-Surface Floor Materials," using BOT-3000E
- G. SA HB 198:2014 (Australian)
- H. ANSI A326.3

- I. United Kingdom Slip Resistance Group (UKSRG) Standards – Issue 4/2011 – www.ukslipresistance.org.uk, using British Pendulum test equipment

1.4 SUBMITTALS

- A. Comply with Section 01330 - Submittal Procedures.
- B. Product Data: Submit manufacturer's product data, including installation instructions.
- C. Engineering Report: Submit Reports
 - a. Glass Engineering Report
 - b. Frame/Shop Drawings
- D. Anti-Slip Documentation: NFSI Certification, B101.3 Reports, ANSI A326.3, or SA HB 198 reports.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Storage: Store materials in clean, dry area indoors in accordance with manufacturer's instructions.
- C. Handling: Protect materials and finish from damage during handling and installation.

PART 2 PRODUCTS

2.1 MANUFACTURER

Specifier Notes: Three things to make sure when listing a manufacturer, 1)Independent Anti-slip testing, see anti-slip design guide or spec's below. 2) Credible History. 3) Provides Engineering Report for each project

- A. Jockimo Inc. (www.jockimo.com) 949-251-1560, 949-251-0126 fax
- B. Technical/Product Contact: Igor Beaufils, igor@igorglass.com, (419) 382-0706
- C. No Substitutions

2.2 MATERIALS

Specifier Notes: This may vary for numerous reasons – aesthetics, loading requirements, structural integrity, etc. Typically Flooring, treads, and landings are 3 layers of tempered glass and treads.

- A. Structural Requirements.
 1. Load Rating: Based on ASCE Tab 4.1 and IBC, Table 1607.1
 - a. Dead Load – weight of the glass
 - b. Uniformly distributed live load – 100 psf
 - c. Concentrated Live Load – 300 lbs over 4 square inches

- d. Analysis or testing must consider above conditions separately and together.
- e. Loads are applied assuming one lite is already compromised.
- 2. Deflection Rating – L/360
- 3. Snow Loads:
- 4. Support Structure – concrete, wood, steel, other _____
- 5. Full, partial, or no perimeter support – number of inches/mm supported _____
- 6. To be verified using Finite Element Analysis

B. Safety Requirements – Anti-Slip

Specifier Notes: Please see Jockimo’s design guide for anti-slip surfaces. DCOF is the most important requirement. SCOF has very limited usefulness. All requirements must be tied to a specific testing standard.

- 1. Dynamic Co-efficient of Friction {Measured Dynamic Coefficient of Friction (DCOF), British Pendulum Test (BPN) = Pendulum Velocity Test (PVT)}
- 2. ANSI B101.3 rating of .43 DCOF requires BOT 3000
- 3. NFSI Level 2 certification – ANSI B101.3 .43 DCOF using BOT 3000
- 4. SA HB 198 test standard – 36 BPN (see standard’s tables for ratings vs. application)
- 5. United Kingdom Slip Resistance Group (UKSRG) Standards – Issue 4/2011 rating of 36 BPN using the British Pendulum Test Device.
- 6. Two of the above standards must be met, unless the SA HB 198 DCOF wet result is 40 or over.

2. All test must be conducted and completed by an Independent Testing Agency or Facility

C. Glass Material:

- 1. Clear Float Glass (green hue).
- 2. Low Iron Glass (examples Optiwhite, Starfire, Eurowhite).
- 3. Color Glass

D. Glass Make up: Basis of Design – Jockimo’s

- 1. Top Layer – Tempered Jockimo Anti-Slip Glass Grit™, Glass Etch™, or Glass Frit™, or Glass Sculpt™
- 2. .060” Lamination Layer – PolyIam (urethane - .090”), PVB, EVA, or SGP
- 3. Middle Layer - ” Tempered Glass
- 4. .060” Lamination Layer – PolyIam (urethane), PVB, EVA, or SGP
- 5. Bottom Layer – _Tempered Glass, patterned, or Slump cast glass
- 6. ½ or 1 Air Space
- 7. 9/16” Solar Ban 60, 70, 72, 90, or equivalent

**Specifier Note: Solar Ban 72 or 90 product version should be used in the Sunbelt and NYC. Solar Ban 60 for New England, upper plains, and Great Lake States. Canadian Provinces – Solar Ban 60 or 72. **

E. Aesthetic Qualities (*Options)

- 1. Transparent, Translucent, or Opaque
- 2. Frosted 1st or 2nd lamination layer
- 3. Tempering Logos – Yes or No
- 4. Anti-Scratch – Yes or No
- 5. Color features within the glass
- 6. Color Features within the lamination layers.

7. Color coat perimeter to hide the frames – Yes or No

F. Support Frame Requirements

1. Metal System to be compatible with Jockimo glass floor and follow their recommendations.

2. Metal Frame Basis of Design: **Gammans Skylight Systems**

Lindsay, sales@gammans.com

10 Beavers St.

Newnan GA 30263

770-254-1992, c) 404-457-5682

www.skylight.systems

3. Deflection Rating: L/500

4. Steel or Aluminum Framing - Alloy 6063-T6 extruded aluminum.

5. If applicable, steel color TBD – powder coating.

6. Clips and Fasteners: Stainless steel or Gammans approved fastener

7. Glazing Materials: Refer to Jockimo – test reports and structural_support pdf.

8. Integrated LED Channel – Yes or No

9. Flat and Level Glazing Surface

10. System will include thermal isolation.

11. Provide minimum of ½” support to the inboard lite.

12. Inboard lite – inset – yes or no

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine areas to receive floor cleanouts. Notify Architect of conditions that would adversely affect installation or subsequent use. Do not proceed with installation until unsatisfactory conditions are corrected.

3.2 INSTALLATION

- A. Adhere to Jockimo’s Structural Support Guidelines.
- B. Use Silicone compatible with laminated glass.
- C. Ensure that glass sits on a level surface.

3.3 PROTECTION

- A. Protect glass from damage during construction.

END OF SECTION