

## **SECTION 14 27 00**

### **ELEVATOR CAB INTERIOR SYSTEMS**

#### **Part 1 GENERAL**

##### 1.1 Summary

- A. Section Includes: Elevator cars and elevator car finishes for electric traction and hydraulic elevators. Pre-engineered elevator interior system including rear and side wall panels, handrail and crash rail, bases, ceiling and lighting. Elevator interior system comes "ready to install" with fasteners, adhesives, and other materials required for a complete assembly. Fasteners shall be concealed type.
- B. Related Sections:
  - 1. Section 09 77 00 – Special Wall Surfacing
  - 2. Section 05 75 00 – Decorative Formed Metal
  - 3. Division 16 – Electrical. General requirements for electrical and lighting specified in this Section.

##### 1.2 References

- A. ASTM E84 – Surface Burning Characteristics of Building Materials.
- B. ASME A17.1 – Safety Code for Elevators and Escalators.

##### 1.3 Submittals

- A. Provide submittals in accordance with Section 01 30 50 and Section 14 21 23 – Submittal Procedures.
- B. Submit manufacturer's shop drawings, installation drawings, installation instructions and maintenance instructions.
- C. Submit environmental impact data for all materials.
- D. Submit samples no less than 4" x 4" for all specified material finishes.
- E. Submit panel edge extrusion samples no less than 4" of specified finish.
- F. Manufacturer information:
  - 1. Provide overview literature describing manufacturer's overall scope of products and manufacturing capabilities.
  - 2. Provide URL for manufacturer's web site; web site must provide access to technical data, images and general product information.

##### 1.4 Quality Assurance

- A. Manufacturer Qualifications
  - 1. Minimum 10 years experience in the manufacture of architectural surface materials.
  - 2. Minimum 10 years experience in the fabrication of elevator cab interiors.
  - 3. Provide reference list of at least 20 public space projects currently using elevator interiors fabricated by the manufacturer.
- B. Installer Qualifications

1. Minimum three years experience in the installation of elevators or elevator interiors.

#### 1.5 Delivery, Storage and Handling

- A. Deliver materials to installation site in manufacturer's original packaging. Handle products in accordance with manufacturer's instructions. Store in dry, secure location, protected against direct sunlight and excessive heat. Protect finished surfaces with strippable film.

#### 1.6 Warranty

- A. Provide manufacturer's standard warranty.
  1. Warranty terms: one year against defects in materials and workmanship.

## Part 2 PRODUCT

#### 2.1 Manufacturer

- A. Forms+Surfaces  
30 Pine Street  
Pittsburgh, PA 15223  
phone: 800-451-0410  
  
fax: 412-385-4715  
email: sales@forms-surfaces.com  
  
website: www.forms-surfaces.com

#### 2.2 Elevator Rear and Side Wall Panels

- A. General
  1. Provide interlocking grid panel system with inset panels mounted in extruded aluminum frames on fire-rated structural backer.
  2. Panel configuration 101, 102, 103, 104, 105, 106, 107, 108 (choose one). See drawing elevations for panel layout.
  3. Provide inset panels in the finishes specified.
  4. Weight per square foot: average 2.40 lbs to 3.04 lbs
  5. Provide interlocking, self-revealing grid frame system comprising no more than five distinct extruded profiles, one to be used as the visible inset panel frame and one to be used as the concealed frame mounting bracket.
  6. Total thickness of installed grid frame and mounting bracket shall be no more than 1.125".
- B. Inset Materials
  1. Stainless Steel Panels
    - a. Material: Stainless Steel.
    - b. Finish: Sandstone, Seastone, Linen, Diamond, Mist, Mirror, Satin, (choose one)
    - c. Impression: Champagne, Chardonnay, Dallas, Denver, Dune, Kalahari (choose one)
    - d. Eco-Etch: City Lights, Current, Dash, Flicker, Glacier, Mica, Reeds, Seagrass, Sequence,

Silkworm, Stacks, Stripe, Thatch, Trace (choose one)

e. Fusion: Carbon, Cinch, Mesa, Moraine (choose one)

f. Fire rating: Stainless Steel is inherently non-combustible and generally considered to be NFPA and IBC Class A fire rated and UBC Class 1 fire rated.

## 2. Fused Metal Panels

a. Material: Fused Bronze, Fused Graphite, Fused Nickel Bronze, Fused Nickel Silver, Fused White Gold (choose one)

b. Finish: Sandstone, Seastone, Linen, Diamond, Mirror, Satin (choose one)

c. Impression: Champagne, Chardonnay, Dallas, Denver, Dune, Kalahari (choose one)

d. Eco-Etch: City Lights, Current, Dash, Flicker, Glacier, Mica, Reeds, Seagrass, Sequence, Silkworm, Stacks, Stripe, Thatch, Trace (choose one)

e. Fusion: Carbon, Cinch, Mesa, Moraine (choose one)

f. Fire rating: Architectural Metals are inherently non-combustible and generally considered to be NFPA and IBC Class A fire rated and UBC Class 1 fire rated.

## 3. Elemental Metal Panels

a. Material: Elemental Carbon

b. Fire rating: Elemental Metal is inherently non-combustible and generally considered to be NFPA and IBC Class A fire rated and UBC Class 1 fire rated.

## 4. Linq Woven Metal Insets

a. Material: Stainless Steel, Brass (choose one)

b. Pattern: Echo, Merge, Rhythm, Slope, Sum, Wave (choose one)

c. Patina: Natural, Dark (choose one)

## 5. Bonded Metal Panels

a. Material: Bonded Aluminum, Bonded Bronze, Bonded Nickel Silver (choose one)

b. Pattern: Austin, Champagne, Chardonnay, Charleston, Dash, Delta, Glint, Grass, Herringbone, Kalahari, Loft, Mara, Rain, Sahara, Talus, Terrane, Tilt, Trevia, Undercurrent, Vancouver, Waterfall (choose one)

c. Patina: Natural or Dark (choose one)

d. Fire rating: NFP and IBC Class B fire rated and UBC class 2 fire rated

## 6. Bonded Quartz Panels

a. Material: Forms+Surfaces Bonded White, Bonded Charcoal (choose one)

b. Pattern: Carbon, Crinkle, Current, Dash, Dune, Glint, Grass, Kalahari, Loft, Mara, Sahara, Tilt, Trevia, Waterfall (choose one)

c. Fire rating: NFP and IBC Class C fire rated and UBC class 3 fire rated

## 7. Laminated Glass Panels

a. Material: VividGlass: ViviChrome Chromis, ViviChrome Scribe, ViviGraphix Gleam, ViviGraphix Graphica, ViviSpectra Elements, ViviSpectra Spectrum, ViviSpectra VEKTR, ViviSpectra Zoom, ViviStone Abalone Onyx, ViviStone Cream Onyx, ViviStone Honey Onyx,

ViviStone Opal Onyx, ViviStone Pearl Onyx, ViviStone White Onyx, ViviStrata Layers, ViviTela Loom, ViviTela Mesh, ViviTela Shibori (choose one)

- b. Material: BermanGlass Levels Kiln Cast Glass: Corduroy + Taupe, Hikaru + Taupe, Nuv'eau + Taupe, Corduroy + Shimmer, Hikaru + Shimmer, Nuv'eau + Shimmer, Hikaru + Shadow, Nuv'eau + Shadow, Corduroy + Switchbacks, Corduroy + Caprice, Nuv'eau + Lagoon, Hikaru + Obsidian (choose one)

8. Illuminated LightPlane Panels (choose one)

- a. Material: VividGlass: ViviChrome Chromis, ViviGraphix Gleam, ViviGraphix Graphica, ViviSpectra Elements, ViviSpectra Spectrum, ViviSpectra VEKTR, ViviSpectra Zoom, ViviStone Abalone Onyx, ViviStone Cream Onyx, ViviStone Honey Onyx, ViviStone Opal Onyx, ViviStone Pearl Onyx, ViviStone White Onyx, ViviStrata Layers, ViviTela Shibori (choose one)
- b. Material: BermanGlass Levels Kiln Cast Glass: Corduroy + Taupe, Hikaru + Taupe, Nuv'eau + Taupe, Corduroy + Shimmer, Hikaru + Shimmer, Nuv'eau + Shimmer, Hikaru + Shadow, Nuv'eau + Shadow, Corduroy + Switchbacks, Corduroy + Caprice, Nuv'eau + Lagoon, Hikaru + Obsidian

9. Lightweight Glass Panels

- a. Material: Diamalite Glass Panels: ViviChrome Chromis, ViviGraphix Graphica, ViviSpectra Elements, ViviSpectra Spectrum, ViviSpectra VEKTR, ViviSpectra Zoom, ViviStone Abalone Onyx, ViviStone Cream Onyx, ViviStone Honey Onyx, ViviStone Opal Onyx, ViviStone Pearl Onyx, ViviStone White Onyx, ViviStrata Layers, ViviTela Mesh, ViviTela Shibori (choose one)

10. Wood Veneer Panels

- a. Material: Forms+Surfaces American Cherry, American Cherry with Dark Mahogany Stain, American Walnut, Bamboo, White Birch, Australian Lacewood, Birdseye Maple, Walnut Burl, Wenge (choose one)

C. Base

1. Stainless Steel

- a. Material: Stainless Steel.
- b. Finish: Forms+Surfaces Sandstone, Seastone, Linen, Diamond, Mist, Mirror, Satin (choose one)

2. Fused Metal

- a. Material: Forms+Surfaces Fused Bronze, Fused Graphite, Fused Nickel Bronze, Fused Nickel Silver, Fused White Gold (choose one)
- b. Finish: Forms+Surfaces Sandstone, Seastone, Linen, Diamond, Mirror, Satin (choose one)

3. Elemental Metal

- a. Material: Elemental Carbon

D. Panel Frames and Reveals

1. Material: Extruded, anodized aluminum
2. Finish: Clear, Black, Antique Bronze or Duranodic Bronze anodized (choose one)

## 2.3 Handrail

### A. General

1. Provide handrails on rear (and side) walls of single opening cars, and on side walls of dual opening cars. For elevator door openings that are flush with the adjacent side wall(s), a returned handrail configuration is recommended.
2. Style: Forms+Surfaces **Modular Series, Round Series, Sextant Series, Rectangular Series, Quadrant Series, Compass Series (choose one)**
3. Material: **Insert material per Style chosen above**
4. Finish: **Insert finish per Style chosen above**

## 2.4 Crash Rail

### A. General

1. Provide crash rail on rear (and side) walls of single opening cars, and on side walls of dual opening cars. For elevator door openings that are flush with the adjacent side wall(s), a returned crash rail configuration is recommended.
2. Style: Forms+Surfaces **4" x 3/8" flat rail**
3. Material: **Stainless Steel**
4. Finish: **Satin**

## 2.5 Ceiling System

### A. General

1. Provide Forms+Surfaces **LEVELe Ceiling** with inset panels mounted in extruded aluminum ceiling frame on fire-rated polycarbonate backer and integral lighting system.
2. Provide removable exit hatch as per ASME A17.1 for emergency egress.

### B. Ceiling Inset Material

1. **Stainless Steel**
    - a. Material: **Stainless Steel.**
    - b. Finish: Forms+Surfaces **Sandstone, Seastone, Linen, Diamond, Mist, Mirror, Satin (choose one)**
  2. **Fused Metal**
    - a. Material: Forms+Surfaces **Fused Bronze, Fused Graphite, Fused Nickel Bronze, Fused Nickel Silver, Fused White Gold (choose one)**
    - b. Finish: Forms+Surfaces **Sandstone, Seastone, Linen, Diamond, Mirror, Satin (choose one)**
  3. **Elemental Metal**
    - a. Material: **Elemental Carbon**
2. **Lighting**
- a. Configuration: **Recessed low-voltage LED downlights per drawings, Recessed low-voltage LED downlights with low-voltage LED perimeter lighting, High-output LED perimeter lighting (choose one)**

b. Color temperature: 3000-3500K, 4000-5000K (choose one)

## 2.6 Associated Components

A. Materials for car operating panels, return panels, doors, jambs, transoms, and floor are not included in this section.

## Part 3 EXECUTION

### 3.1 Preparation

A. Protect elevator finishes, fixtures and equipment from damage caused by work of this Section.

### 3.2 Installation

A. Do not make structural changes to elevator cab. Do not install work in a manner that interferes with the safe operation of elevator.

B. Install in accordance with elevator interior system manufacturer's instructions.

### 3.3 Cleaning and Protection

A. Remove strippable film. Clean exposed surface in accordance with manufacturer's instructions.

B. Protect exposed surfaces from damage by subsequent construction.