

LEVEL 9

Galvanized Steel Security Ceiling (with top plate)

Model: G-CLG-T

PART 1 GENERAL

1.01 Description

The security ceiling shown on the plans and herein specified is the product of Kane Innovations, Erie, Pennsylvania. This manufacturer's name and products have been used to establish the standards of construction and quality of workmanship required for this project. Manufacturers bidding on this project must be actively engaged in the fabrication of the specified items for a minimum of five (5) years prior to the bid date. Manufacturers requesting approval to bid their products as equal must submit to the Architect full-size drawings, including details of construction, and a complete operating security ceiling sample, ten (10) days prior to the bid date.

1.02 Submittals

- A. Manufacturer shall submit shop drawings, showing details of attachment to surround materials and reflected ceiling plan showing scope of the project.
- B. Samples of materials as may be requested without cost to owner: frame sections, fasteners, mullion section, etc.

1.03 Warranty

- A. The responsible contractor shall warrant for one (1) year the satisfactory performance of the ceiling installation, which includes ceiling components, installation accessories and anchorage as called for by the specifications and approved shop drawings.
- B. The performance of the products supplied by Kane Innovations on the designated project is warranted for one (1) year against any proven defective material or parts, as called for in the specifications and approved shop drawings. This warranty does not cover abuse by others.

PART 2 PRODUCTS

2.01 Acceptable Manufacturers

Kane Innovations, Erie, PA,
☎ (800) 773-2439

2.02 Ceiling Components

- A. Perimeter wall angles of 10-gauge steel formed 2-1/2" [63.5] x 2-5/16" [58.74] x 1" [25.4] x 11/16" [17.46]. Wall angle will be supplied in stock lengths of 120" [3048] for field trimming and will have pre-punched mounting holes.
- B. Ceiling plank shall be of 14-gauge A40 galvanized steel and formed 7/8" [22.23] x 2-1/4" [57.15] x 24" [609.6] x 2-1/4" [57.15] x 7/8" [22.23] for full planks. Ceiling plank shall be perforated with 5/32" [3.97] diameter holes spaced 3/8" [9.53] staggered centers. Ceiling planks shall be held in place with hold down clips along wall and No. 12 x 3/4" [19.05] self-drilling screws on 20" [508] centers where planks come together.
- C. Hold down clips of 14-gauge A40 galvanized steel formed 1-1/2" [38.1] x 2-5/8" [66.68]. Hold down clips to be located 2 per each end of full planks and 18" [457.2] on center along length of partial planks. Hold down clips shall be held in place with No.12 x 3/4" [19.05] self-drilling screws, 2 per clip.
- D. Sound deadening insulation of one inch thick material of glass fiber type with 1.5lb density and below 3% moisture absorption.
 - a. Insulation shall meet ASTM E 84, UL 723 and NFPA-255 fire codes (does not exceed 25 flame spread, 50 smoke developed).
 - b. Airstream surface mat facing is treated with an EPA-registered anti-microbial agent to aid in the prevention of fungal and bacterial growth of mold, fungi or bacteria per ASTM C 1138, G 21, G 22
- E. Closure plate above insulation shall be of 14-gauge A40 galvanized steel.

2.03 Testing and Performance

- A. Acoustical Performance
 - a. Ceiling system shall provide a Noise Reduction Coefficient (NRC) of not less than .80 when tested in accordance with ASTM C 423.
 - b. Ceiling system shall provide a Sound Absorption Average (SAA) of not less than .78 when tested in accordance with ASTM C 423.
 - c. Ceiling system shall provide a Ceiling Attenuation Class (CAC) of not less than 16 when tested in accordance with ASTM C 423.
- B. Surface Burning Performance
 - a. Ceiling system is rated as Class "A" in which Flame Spread Index does not exceed 5 with Smoke Developed Index not exceeding 35 when tested in accordance with ASTM E 84.
- C. Load Performance
 - a. Load Classification of Direct Hung "Heavy" in which Load is > 19 lbs/ft with a deflection < .40in. over a 12' span when tested in accordance with ASTM C 635.
- D. Other options available. Contact factory for more information.

2.04 Finish

- A. All exterior surfaces of the ceiling plank shall be thoroughly cleaned in a 5-step bonderizing process. The exterior surface of the ceiling plank shall receive an electrostatically applied thermoplastic, polyester powder coating (2.5 mil min. thickness) which shall be applied and baked to a hard, mar-resistant white finish.

PART 3 EXECUTION

3.01 Inspection

- A. Verify that openings fit allowable tolerances, provide a solid anchoring to structure and comply with approved shop drawings.
- B. Installer shall inspect the area that is to receive the security ceiling system for conditions that may affect the installation and notify, in writing, all conditions that need rectified before commencing.
- C. All work above the ceiling shall be completed before proceeding with installation of security ceiling.

3.02 Installation

- A. Align wall angles in a single plane and erect ceiling planks square and true, structurally anchored.
- B. Ceiling openings shall conform to the details and dimensions shown on the approved shop drawings.
- C. Any abraded surface of the ceiling finish shall be cleaned and touched up with air dry paint, as approved and furnished by the ceiling manufacturer, in a color to match factory applied finish.
- D. Ceiling installer shall leave the ceiling surfaces clean after installation. The General Contractor shall be responsible for final cleaning.
- E. Material shall be stored in dry and protected area(s)

PART 4 ENVIRONMENTAL REPORTING

4.01 LEED Materials and Resources

- A. Recycled Content: This product contributes toward satisfying Credit 4 under LEED.
- B. Regional Material: This product can contribute toward satisfying Credit 5 under LEED.