



1873 Williamstown Drive
St. Peters, Missouri 63376
P. 888.736.2726
P. 636.978.7781
Fax. 636.978.7782

www.arcoplast.com

SECTION 09545
SPECIAL CEILING SURFACES
SUSPENDED CEILINGS "A" EXPOSED GRID SYSTEM

PART 1: GENERAL

1.01 CONDITIONS

A: Include for provisions of General and Supplementary Conditions of the contract between Owner and General Contractor.

1.02 WORK SCOPE

A: Supply and install suspended ceilings described on drawings, schedules, and specifications, including;

1. Suspension systems
2. Ceiling panels
3. Splines, joint covers, mastic, sealants, fasteners, and other components required for a complete, hermetically sealed, ceiling assembly
4. Ceiling access doors

1.03 WORK SPECIFIED ELSEWHERE

A: Work specified elsewhere includes supply and installation of

1. Recessed or surface mounted electric fixture
2. Plumbing, heating, air conditioning, and fire protection components
3. Work by other trades above or penetrating ceilings

1.04 DESIGN CRITERIA

- A.** Maximum deflection of ceiling planes: 1/180 of spans, measured in accordance with ASTM C635-83
- B.** Ceiling panels and joint covers sealed per USDA requirements

1.05 INSTALLATION CONDITIONS

- A.** Start installation only after building is enclosed, and work areas protected from dust, dirt, or operations of other trades
- B.** Maintain 15C (60F) minimum temperature, and 20-40% humidity level in work areas during and after installation

1.06 PRODUCT DATA

- A. Provide documentation and written information on material composition and panel construction, test performance, load charts and handling procedures

1.07 SHOP DRAWINGS

- A. Prepare and submit shop drawings of all pertinent assemblies to Consultant for review prior to work start: revise drawing to conform with Consultant's comments, and keep 1 copy of corrected drawings in job throughout installation period; indicate:
 1. Suspension system spacing and details
 2. Splicing, joint treatment, and fastening details of panels
 3. Changes in ceiling planes, openings, and intersections with vertical element
 4. Ceiling access door dimensions and location

1.08 SAMPLES

- A. Supply samples of all components of ceiling installation to Consultant for prior approval
- B. Keep 1 sample of each component in job office throughout installation period

PART 2 PRODUCT

2.01 GENERAL

- A. Gel coat composition shall be factory formulated and applied

2.02 PANELS

- A. Panels: 'Arcoplast' molded fiber glass core (manufactured by Arcoplast, Inc.) insulated closed edge panels composed of chop strand mat impregnated with a fire-rated resin and a USDA/ Antimicrobial gel coat surface finish, thickness to drawings

2.03 ACCESSORIES

- A. Sealant: Silicone 999A for sealing between ceiling tile and grid
- B. Sealant: Vulkem 921 one part moisture cure polyurethane for sealing stainless steel conduits at ceiling tile junctions
- C. Arcoplast finishing compound: a permanent white aliphatic base urethane for all exposed junctions of ceiling tile, bulkheads, wall liner and partitions
- D. Tape: Polyester acrylic 2" tape # 850 3M
- E. Fasteners: coated or stainless steel screws, size and type consistent with installation conditions
- F. Wall molding: extruded aluminum profile set in mastic mechanically fastened
- G. Inverted Tee Runner suspension system hung from existing structural steel:
 1. Main Runners: Inverted Tee profile in extruded aluminum alloy 6063-T5. Exposed surfaces shall have a white powder coat finish. 1.5" (38mm) high x 1.5" (38mm) exposed flange x 12'0" (3.66m) in length
 2. Cross Runners: Inverted Tee profile in extruded aluminum alloy 6063-T5. Exposed surfaces shall have a white powder coat finish. 1.5" (38mm) high x 1.5" (38mm) exposed flange x 2'-0" (600mm) and/or 4'-0" (1200mm)
 3. Wall molding: angle profile in extruded aluminum alloy 6063-T5. Exposed surfaces shall have a white powder coat finish. 1.5" (38mm) x 1.5" (38mm).
 4. Wire: #12 Gauge soft annealed galvanized wire

PART 3 EXECUTION

3.01 EXAMINATION

- A. Do not start installation until Consultant has inspected and approved all work above ceiling
- B. Check for irregularities at wall, columns, and all vertical elements

3.02 PREPARATION

- A. Protect other surfaces and equipment from damage
- B. Ensure all floor cavities, trenches and drains are covered and protected
- C. Install all work in conformity with panel manufacturer's written instruction

3.03 FABRICATION

- A. Unless otherwise indicated, lay out ceiling to provide balanced borders at room perimeters; obtain Consultant's approval for all border panels less than 50% standard unit width
- B. All tile and exposed suspensions systems shall be straight and in alignment
- C. Tile should be neatly scribed against abutting surfaces and to all penetrations or protrusions when moldings are not required Border units with saw cut edges to be sealed with a moisture resistant 2" tape # 850 -3M
- D. Tile surrounding recessed troffer lights and similar openings shall be installed with a positive method to prevent movement or placement of these tiles
- E. Seal all penetrations or protrusions
- F. Construct expansion joints to detail

3.04 FIELD QUALITY CONTROL

- A. Verify that furring, blocking, nailers, and other panel supports are located:
 - 1. To ensure correct ceiling height
 - 2. To ensure ceiling planes to be level within 1:1000
 - 3. As required to support lights, diffusers, and other components bearing on ceiling within design limits

3.05 CLEANING

- A. Keep the working area free of excess debris, tools, and surplus material during the course of the work
- B. Touch up damaged gel coated surfaces, and clean completed installation

3.06 PROTECTION

- A. Allow 72 hours curing time before pressure wash down sanitation procedures

END OF SECTION
09545-4