

09 51 13 - Acoustic Panel Ceilings

DIVISION 09 - Finishes



Saint Paul
PUBLIC SCHOOLS

STATEMENT OF PURPOSE & BACKGROUND

- Scope:
 - Selection and installation of suspended acoustic ceiling assemblies.
- Statement of goals:
 - Provide ceiling systems that:
 - Provide high performance.
 - Are durable in relation to impact, scratch and soil resistance.
 - Meet or exceed the acoustic qualities set for each space.
 - Provide light reflectance minimums.
 - Are dimensionally stable in non-tempered spaces.
 - Inhibit and retard the growth of mold and mildew.
 - Meet or exceed 38% recycled content.
- This section is intended for typical ceiling tile products for general use in new or existing buildings. Refer to Section 09 80 00 Acoustical Treatment for alternative products for special-use applications or installations in buildings requiring improved acoustical treatments that differ from these criteria.
- Revision history of section:
 - 03/04/2013
 - 10/06/2015
 - 02/01/2019
 - 02/22/2021
 - 10/28/2022

SELECTION AND APPLICATION CRITERIA

Application	Acoustics		Light Reflection (LR)	Flame Spread
	CAC	NRC		
Administrative Offices	> 35	> .65	> .85	Class A
Auditorium	> 40	> .70	> .80	Class A
Cafeterias	> 40	> .70	> .85	Class A
Classrooms	> 40	> .70	> .85	Class A
Corridors	> 40	> .70	> .80	Class A
Gymnasiums	> 40	> .70	> .80	Class A
Kitchen/Food Prep Areas	> 35	> .65	> .85	Class A
Locker Rooms	> 35	> .65	> .80	Class A
Media Centers	> 40	> .70	> .80	Class A
Music/Band Rooms	> 40	> .75	> .80	Class A
Staff Restroom	> 40	> .55	> .80	Class A
Student Restroom	> 40	> .55	> .80	Class A

SELECTED PRODUCTS

Application	Product *	Tile Size **
Administrative Offices	ACT-2	24"x24"
Auditorium/Media Centers	See Section 09 80 00 for acoustic treatment	
Cafeterias	ACT-6	24"x24"
Classrooms (Elementary)	ACT-6	24"x24"
Classrooms (Secondary)	ACT-6	24"x24"
Corridors	ACT-6	24"x24"
Gymnasiums (where acoustic ceilings are specified)	ACT-4	24"x24"
Kitchen/Food Prep Areas	ACT-1	24"x24"
Locker Rooms	ACT-5	24"x24"
Shower Rooms (where acoustic ceilings are specified – not recommended)	ACT-7	24"x24"
Media Centers	ACT-3	24"x24"
Music/Band Rooms	ACT-3	24"x24"
Staff Restroom	ACT-5	24"x24"
Student Restroom	ACT-5	24"x24"

* Note: This table is not prescriptive as to exclude other finishes; i.e. restrooms may have plaster ceilings in lieu of ceiling tile. Gymnasiums may have acoustical deck or other treatments in lieu of ceiling tile. See Section 09 80 00 for additional information and criteria in specific spaces that may differ from these guidelines.

** Sizes shown for design only. Tile size and type should match immediate adjacent system in existing buildings where existing system is to remain. Alternative ceiling products may be considered for Owner approval. Certain building conditions such as ceiling heights may dictate variations from these standard ceiling types.

OUTLINE SPECIFICATION

- Part 1 General
 - Extra Materials
 - Contractor to not supply any additional attic stock unless directed otherwise by Owner.
 - Procure ceiling tile products from one manufacturer where possible, while meeting all specification criteria listed.
 - Warranty: Lifetime (30 year) warranty
 - Ceiling Systems Lifetime Warranty panels and tile. Individual Product will be 10 year warranty.
- Part 2 Products
 - CG-1
 - Product: USG Donn DX, DXL24HRC
 - Size: 15/16" Exposed Tee for Lay-in or Tegular panels as specified
 - Material: Galvanized Steel
 - Color: White
 - Recycled Content: Minimum 25%

- Acceptable Manufacturers/Products:
 - Chicago Metallic 200 Snap Grid
 - CG-2
 - Product: USG Donn DXLA or ZXLA
 - Size: 15/16" Exposed Tee
 - Material: Galvanized Steel with aluminum cap
 - Color: White
 - Equivalent manufacturers approved, in writing, in advance, by the Architect, may be substituted in accordance with the provisions of the Contract.
 - ACT-1:
 - Product: USG Sheetrock Lay-In Gypsum Ceiling Panels, #3260
 - CAC: 35
 - Flame Spread: Class A (UL)
 - Light Reflectance: 0.77
 - Recycled Content: 80%
 - Surface Texture: Smooth
 - Material: Gypsum board panel with vinyl laminated face
 - Washable and scrubbable finish
 - Color: White
 - Size: 24" x 24" x 1/2"
 - Edge Profile: Square Lay-In
 - Acceptable Manufacturers: Armstrong World Industries
 - Equivalent manufacturers approved, in writing, in advance, by the Architect, may be substituted in accordance with the provisions of the Contract.
 - ACT-2:
 - Product: Armstrong, Cirrus High NRC - #556
 - CAC: 35
 - NRC: 0.75
 - Flame Spread: Class A (UL)
 - Light Reflectance: 0.84 min.
 - Recycled Content: >66%
 - Surface Texture: Fine
 - Material: Mineral Fiber, Wet-formed
 - Color: White
 - Size: 24" x 24" x 7/8"
 - Edge Profile: Angled Tegal for interface with compatible grid.
 - Acceptable Manufacturers/Products:
 - USG Corporation: Radar Open Plan ClimaPlus High NRC #22340, 24" x 24" x 7/8".
 - Equivalent manufacturers approved, in writing, in advance, by the Architect, may be substituted in accordance with the provisions of the Contract.
 - ACT-3:
 - Product: Armstrong, Cirrus High NRC - #563
 - CAC: 35
 - NRC: 0.75
 - Flame Spread: Class A (UL)
 - Light Reflectance: 0.85
 - Recycled Content: >66%
 - Surface Texture: Fine

- Material: Mineral Fiber, Wet-formed
 - Color: White
 - Size: 24" x 24" x 7/8"
 - Edge Profile: Square Lay-In
 - Acceptable Manufacturers/Products:
 - USG Corporation: Radar Open Plan ClimaPlus High NRC #22320, 24" x 24" x 7/8".
 - Equivalent manufacturers approved, in writing, in advance, by the Architect, may be substituted in accordance with the provisions of the Contract.
- ACT-4
 - Product: Armstrong, Armatuff #861
 - CAC: 33
 - NRC: 0.50
 - Flame Spread: Class A (UL)
 - Light Reflectance: .87
 - Surface Texture: Coarse, Perforated
 - Material: Wet-formed, High-Density Mineral Fiber
 - Color: White
 - Size: 24" x 24" x 3/4"
 - Edge Profile: Square Edge
 - Provide Retention Clips for suspension system in gymnasiums
 - Acceptable Manufacturers/Products:
 - USG Corporation: Rock Face Panels, #56335, 24" x 24" x 5/8".
 - Equivalent manufacturers approved, in writing, in advance, by the Architect, may be substituted in accordance with the provisions of the Contract.
 - ACT-5
 - Product: Armstrong, Ceramaguard Fine Fissured, #607
 - CAC: 38
 - Flame Spread: Class A (UL)
 - Light Reflectance: 82%
 - Surface Texture: Medium
 - Material: Mineral Fiber, Scrubbable finish
 - Color: White
 - Size: 24" x 24" x 5/8".
 - Edge Profile: Square Lay-in
 - Acceptable Manufacturers/Products:
 - USG, Radar ClimaPlus High Durability Panels, #2207
 - Equivalent manufacturers approved, in writing, in advance, by the Architect, may be substituted in accordance with the provisions of the Contract.
 - ACT-6
 - Product: Armstrong School Zone Fine Fissured – #1810
 - CAC: 40
 - NRC: 0.70
 - Flame Spread: Fire Guard
 - Light Reflectance: .85
 - Recycled Content: >50%
 - Surface Texture: Fine Fissured
 - Material: Mineral Fiber, Wet-formed
 - Color: White
 - Size: 24" x 24" x 3/4"

- Edge Profile: Square Lay-in
- Acceptable Manufacturers/Products:
 - USG Corporation: Radar Firecode High-NRC/High-CAC - #22521, 24"x24"x3/4".
 - Equivalent manufacturers approved, in writing, in advance, by the Architect, may be substituted in accordance with the provisions of the Contract.
- ACT-7
 - Product: USG Radar Ceramic - #56644
 - CAC: 40
 - NRC: 0.50
 - Flame Spread: Class A (UL)
 - Light Reflectance: .82
 - Recycled Content: 44%
 - Surface Texture: Fine Fissured
 - Material: 100% Ceramic-Bonded Mineral Fiber
 - Color: White
 - Size: 24" x 24" x 5/8"
 - Edge Profile: Square Lay-in
 - Grid System: CG-2 referenced above
 - Equivalent manufacturers approved, in writing, in advance, by the Architect, may be substituted in accordance with the provisions of the Contract.
- Part 3 Execution
 - Installation of suspension systems and panels shall be in accordance with the manufacturer's instructions, and in compliance with the authorities having jurisdiction.

End of Section