

New Ceiling Tiles Product Specifications

New Ceiling Tiles, LLC, 5035 FM 2920 RD #401, SPRING, TX 77388-3114

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PRODUCT NAME: Vinyl RP Grid

PRODUCT FEATURES

◦ BASIC USES / RELATED USES

- PVC suspension ceiling assembly for interior and exterior high humidity and corrosive environments.
- Solid vinyl construction eliminates rust and white corrosion.
- Acoustic panels not included.

◦ PRODUCT ATTRIBUTES AND CHARACTERISTICS

- Suspended grid, lay-in type.
- Keyhole operation makes installation simple.
- Flexible to fit most 610 x 610 mm (24 x 24 inches) or 610 x 1220 mm (24 x 48 inches) flat lay in or revealed edge ceiling tile.
- Available for standard thickness dimensional tile and tile/panel up to 38 mm (1-1/2 inch) thick.

◦ ENVIRONMENTAL

- PVC site cuttings and unused pieces can be collected and recycled.
- Product may be recycled upon final disposal.

◦ SELECTION CRITERIA

- Developed for applications requiring a ceiling that is able to withstand humidity as an alternative to aluminum, glass fiber, or stainless steel systems.
- Tiles/panels can be replaced or removed easily for access or any other reason.
- Suitable spaces for installation include bathrooms, kitchens, food manufacturing and processing plants, laboratories, swimming pools, and exterior applications.

◦ APPLICABLE STANDARDS, RELATED REFERENCES

- ASTM C665 - Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing.
- ASTM D638 - Standard Test Method for Tensile Properties of Plastics.
- ASTM D696 - Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between -30°C and 30°C with a Vitreous Silica Dilatometer.
- ASTM D790 - Standard Test Methods for Flexural Properties of Un-reinforced and

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Reinforced Plastics and Electrical Insulating Materials.

- ASTM D792 - Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement.
- ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
- ASTM E580 - Practice for Application of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Requiring Seismic Restraint.
- CISCA (Ceilings & Interior Systems Contractors Association) Ceiling System Handbook and Acoustic Ceilings Use and Practice.
- ISO 4611 - Plastics - Determination of the Effects of Exposure to Damp Heat, Water Spray and Salt Mist.
- ISO 12944-2 - Paints and Varnishes – Corrosion Protection of Steel Structures by Protective Paint Systems, Part Two: Classification of Environments.
- UL - Fire Resistance Directory.
- USFDA (United States Food and Drug Administration)

◦ **QUALITY STATEMENT, TESTS, CERTIFICATIONS, AND APPROVALS**

- Fire Resistance to UL Design #94.
- Fire Performance: Class A.
 - Standard finish: (flame spread 10, smoke developed 140) to ASTM E84.
 - Foil-faced finishes: Flame spread 15, smoke developed 250, to ASTM E84.
- USFDA approval of the resin used in the RP-GRID system for food processing applications.
- Durometer Hardness: 82 to ASTM D2240.
- Tensile Strength: 44.1 MPa (6400 psi); Tensile Modulus of 2,620 MPa (380,000 psi) to ASTM D638.
- Flexural Strength: 77.9 Mpa (11,300 psi); Flexural Modulus of 2,827 Mpa (410,000 psi) to ASTM D790.
- Heat Deflection Temperature: 73 degree Celsius (163 degree Fahrenheit) to ASTM D648.
- Coefficient of Linear Expansion: 3.3×10^{-5} in/in/degree Fahrenheit to ASTM D696.

◦ **PACKAGING, HANDLING, PROTECTION, AND DELIVERY INSTRUCTIONS**

- Deliver materials in original RP-GRID cartons and take care to handle and protect against damage such as moisture, breakage, dirt, surface soiling, etc.
- Allow all ceiling components to acclimate to room temperatures before installation.

◦ **SPECIAL WARRANTY**

- Limited Warranty: Ten (10) years from product manufacturing defects.

◦ **LIMITATIONS**

- System is not rated for higher zoned seismic areas.
- RP-GRID is not intended for extremely high or low temperature service environments – consider coefficient of linear expansion when applying tight to surrounding construction.
- Certain chemical solvents should be avoided, contact manufacturer for more information.

◦ **AVAILABILITY**

- Nationally and internationally.

◦ **COST**

- Refer to New Ceiling Tiles (NCT) and authorized representatives for pricing.

PRODUCT PROPERTIES

◦ **MATERIAL, COMPOSITION, AND DESIGN**

- Grid material: Virgin grade poly vinyl chloride (PVC)
- Laminated material: Acrylonitrile butadiene styrene terpolymer (ABS) plastic laminated with hop stamping foil.

◦ **SHAPE, MASS, AND DIMENSIONS**

- Grid Components:
 - Manufacturer's Grid Style: New Ceiling Tiles (NCT) “RP-GRID”:
 - Patent # 6,851,238

Grid Face	Item #	Description	Dimensions
24 mm (15/16 inches)	312	Main	2440 mm (96 inches)
24 mm (15/16 inches)	320	Tee	610 mm (24 inches)
24 mm (15/16 inches)	250	Angle Molding	2440 mm (96 inches)

- Grid Nominal Size: 610 x 610 mm (24 x 24 inches) or 610 x 1220 mm (24 x 48 inches).
- Profile: PVC material,
 - Bottom flange, vertical web, hollow top bulb, 51 mm (2 inches) high:
 - Main Runner Slots: 300 mm (12 inches) on center, starting 300 mm (12 inches) from ends.
 - Cross Tees: 305 mm (12 inches) on center, starting from ends.
- Bottom of Runner Face Width: 24 mm (15/16 inch).
- Grid Accessories: Perimeter moldings, hold down clips, main connector, and FRP clips.
- Supplementary Support Channels:
 - Galvanized steel.
 - Size and type to suit application [and seismic requirements].
 - Conform to ceiling system flatness requirement specified.

- Support Hangers: Galvanized carbon steel wire, soft temper, pre-stretched, yield strength at least three times design load.
- Minimum 0.106 mm (12 gage) diameter to suit application, seismic requirements, and ceiling system flatness requirements specified

○ **SHOP FABRICATION AND ASSEMBLY**

- All assembly can be completed on site.

○ **FINISH, COLORS AND TEXTURES**

- Standard Colors:
 - Unpainted: White, paintable (00).
 - Metallic: Brass (04), Chrome (05), Satin Black (07), Brushed Aluminum (08), Silver (09), Copper (10), Copper Fantasy (11), Verdigris (16), Bermuda Bronze (17), Moonstone Copper (18) Cracked Copper (19), Muted Gold (20), Cross Hatch Silver (21), Gold (24), Polished Copper (25).
 - Wooden: Light Maple (12), Pearwood (13), Welsh Cherry (14) Medium Oak (06)
- Custom Colors: Contact manufacturer for colors.

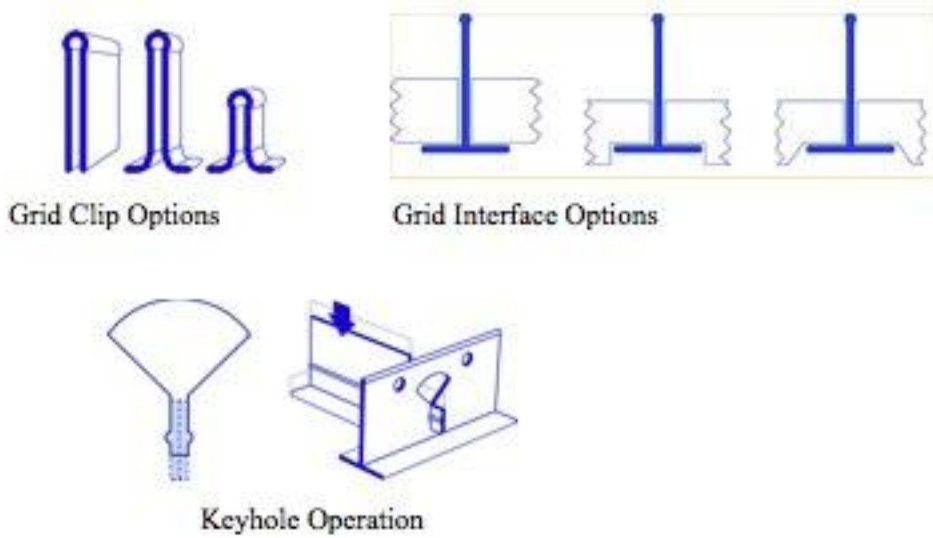
PRODUCT PLACEMENT

○ **PREPARATION WORK**

- Perform installation as late as possible in the building process, after any dust generating activities have been completed.

○ **INSTALLATION, ERECTION, APPLICATION, CONSTRUCTION**

- Install wall molding around perimeter of room plumb to height required.
- Install gypsum board screws 400-610 mm (16-24 inches) on center, miter corners.
- Establish alignment to have equal amounts of tile/panel showing on opposite sides of the room.
- Install main runners at 610 mm (24 inches) on center.
- Install hanger wires on 1220 mm (48 inches) centers, maximum 200 mm (8 inches) from wall.
- Install cross tees into bulbs by snapping tee down into opposing notch in main keyhole.
- Consult manufacturer for complete installation guide.



◦ **MAINTENANCE INSTRUCTIONS AND PROCEDURES**

- Clean with a mild soap and water.
- On a daily basis, moderate dust or vacuum clean with a soft, clean brush attachment.
- On a weekly basis, manual wet clean.