

Product Name

HumiGRID

Manufacturer's Name

Acoustic Ceiling Products, LLC.



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PRODUCT DESCRIPTION

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 any 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.
 - Light and Intermediate duty class.

- **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 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.

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- 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 (flame spread 10, smoke developed 140) to ASTM E84.
 - USFDA approval of the resin used in the HumiGRID 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 Celcius (163 degree Fahrenheit) to ASTM D648.
 - Coefficient of Linear Expansion: 3.3 x 10⁻⁵ in/in/degree Fahrenheit to ASTM D696.

- **PACKAGING, HANDLING, PROTECTION, AND DELIVERY INSTRUCTIONS**
 - Deliver materials in original HumiGRID 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: Five (5) years from product manufacturing defects.

- **LIMITATIONS**
 - System is not rated for higher zoned seismic areas.
 - HumiGRID 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 Acoustic Ceiling Products, LLC. 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.

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- **SHAPE, MASS, AND DIMENSIONS**

- **Grid Components:**

- .1 Manufacturer's Grid Style: Acoustic Ceiling Products, LLC. "HumiGRID":
- .2 * Patents Pending – Patent # 6,305,137 and 6,324,806

Grid Face	Item #	Description	Dimensions
24 mm (15/16 inch)	310	Light Duty Main	2440 mm (96 inches)
24 mm (15/16 inches)	312	Intermediate Duty 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)

- .3 Grid Nominal Size: 610 x 610 mm (24 x 24 inches) or 610 x 1220 mm (24 x 48 inches).

- .4 Profile: PVC material,

- .1 Bottom flange, vertical web, hollow top bulb, 51 mm (2 inches) high:
- .2 Main Runner Slots: 300 mm (12 inches) on center, starting 300 mm (12 inches) from ends.
- .3 Cross Tees: 305 mm (12 inches) on center, starting from ends.

- .5 Bottom of Runner Face Width: 24 mm (15/16 inch).

- .2 Grid Accessories: Perimeter moldings, hold down clips, main connector, and FRP clips.

- .3 Supplementary Support Channels:

- .1 Galvanized steel.
- .2 Size and type to suit application [and seismic requirements].
- .3 Conform to ceiling system flatness requirement specified.
- .4 Support Hangers: Galvanized carbon steel wire, soft temper, pre-stretched, yield strength at least three times design load.
- .5 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.

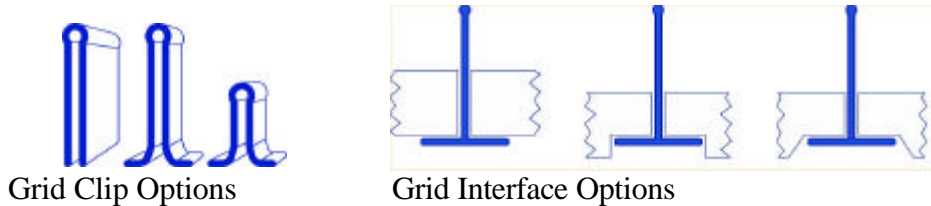
- **FINISH, COLORS AND TEXTURES**

- Standard Colors: White 00
- Custom Colors: Contact manufacturer for colors.
- Patterns: Available upon request.

PRODUCT PLACEMENT

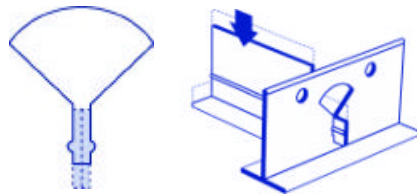
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- **PREPARATION WORK**
 - Perform installation as late as possible in the building process, after any dust generating activities have been completed.
- **INSTALLATION, ERECTION, APPLICATION, CONSTRUCTION**
 - Install wall molding around perimeter of 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.



Grid Clip Options

Grid Interface Options



Keyhole Operation

- **MAINTENANCE INSTRUCTIONS AND PROCEDURES**
 - Clean with a mild, non-abrasive liquid cleaner such as Formula 409 or Fantastik.
 - On a daily basis, moderate dust or vacuum clean with a soft, clean brush attachment.
 - On a weekly basis, manual wet clean.

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Corporate Identification

Acoustic Ceiling Products, LLC.

P.O. Box 1581

Appleton, WI, U.S.A. 54912-1581

Phone - Toll Free: 1-800-434-3750

Fax - Toll Free: 1-800-434-3751

E-mail to: techsupport@acpideas.com

Web site: www.acpideas.com.

Technical Services Available

Products available nationally and from regional representatives.

Classification and Filing

MasterFormat

Section 09531 – PVC Suspended Ceiling Assembly

UniFormat

Section C3030 – Ceiling Finishes