

Frequently Asked Questions – Hart & Cooley Residential GRDs

What is "Free Area"?

Free area is the total minimum area of the openings in the supply outlet or return inlet (usually in square inches) through which air can pass. Also known as the "see-through area". (See also "effective area"). The free area should NOT be used to determine the amount of air that can pass thru the grille when it's being forced thru by a fan. Free area only applies to natural (gravity) air transfer thru the grille (i.e. combustion air into an appliance room).

Future links to additional free area lists not found in our catalog:

Free Area - 92, 93, 94 & 98VOH

Free Area - 94A

Free Area - 210 & 265

Free Area - 672 & 673

Free Area - 650 & 659

Free Area - Misc.

What is "Effective Area" or "Ak" in the engineering tables ?

Effective area, Ak, is the net area (in square feet) of a grille utilized by the area stream in passing through the face openings. It is used in the equation: CFM= Face Velocity * Effective Area. This is used in our engineering data tables.

What is the required load rating for floor registers/grilles?

Per the mechanical code, the requirement is a 200lb load applied to a 2" disc at the most critical area of a floor register. All of our registers (utility and decorative) meet or exceed this requirement. Our most robust model would be the 210/265 models.

Do you have Material Data Safety Sheets (MSDS) for your products?

No, because Hart & Cooley products meet the definition of an "article", they are not subject to the OSHA Hazard Communication Standard. Therefore, Material Safety Data Sheets are not required. Under Section 1910.1200 (b)(5) of the OSHA Hazard Communication Standard an article is defined as any manufactured item:

- (1) which is formed to a specific shape or design during manufacture,
- (2) which has end-use functions dependent in whole or in part upon its shape or design during end-use, and
- (3) which does not release, or otherwise result in exposure to, a hazardous chemical under normal conditions of use.

I have another Question

Visit our Tech Corner for additional resources that cover a variety of topics or

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