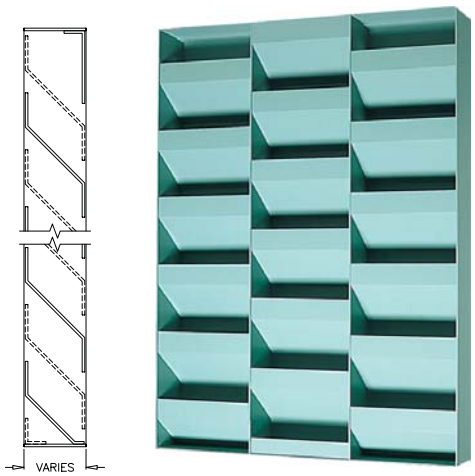
GREENHECK

Grille
INVERTED BLADE

Application and Design

Greenheck Inverted Blade Grilles are custom designed and manufactured to function as architectural accents or as entire facades to prevent sight or serve as solar screens or security barriers. Inverted Blade Grilles feature a unique vertical and horizontal grid profile that is ideal for use as a visual barrier or for management of natural or artificial light sources. Inverted Blade Grilles are manufactured in configurations from 3 in. (76.2 mm) to 6 in. (152.4 mm) deep and with aluminum members that range in thickness from 0.081 in. (2.06 mm) to 0.125 in. (3.18 mm). Horizontal blade spacing can vary from a minimum of 5½ in. to a maximum of 11 in. (279.4 mm) center spacing based on the preferred grille depth. Vertical bar spacing can be configured from minimum of 9 in. (228.6 mm) to maximum 48 in. (1,2198.20 mm) center spacing to achieve desired sightlines.



Standard Construction

Material. . . . . .Fabricated Aluminum, Alloy 5052-H32
Material Thickness . . . . . .0.081 to 0.125 in. (2.06 to 3.18 mm)
Grille Depth . . . . . .3 to 6 in. (76.2 to 152.4 mm)
Perimeter Frame . . . . . .Aluminum Bar, Channel or Tube
Horizontal Bar Angle. . . . . .45°
Horizontal Bar Spacing . . . . . .5.5 to 11 in. (139.7 to 279.4 mm)
Vertical Bar Spacing. . . . . .9 in. to 48 in. (228.6 to 1219 mm)
Minimum Dimension . . . . . .10 in. (254 mm)
Maximum Dimension . . . . . .120 in. (3048 mm)

One dimension not to exceed 72 in.

Options (at additional cost)

- Anchor clips
- A variety of bird and insect screens
- A variety of architectural finishes including:
  - Clear anodize
  - Integral color anodize
  - Baked enamel paint
  - Kynar paint

Recommended Specifications

General

Where indicated on plan drawings or described in schedules, furnish and install Inverted Blade Grilles as designed and manufactured by Greenheck Fan Corporation, Schofield, WI. Grilles shall be furnished in the configurations represented on the plan drawings and shall include installation hardware and finishes as specified and required for a complete installation.

Welded Assembly

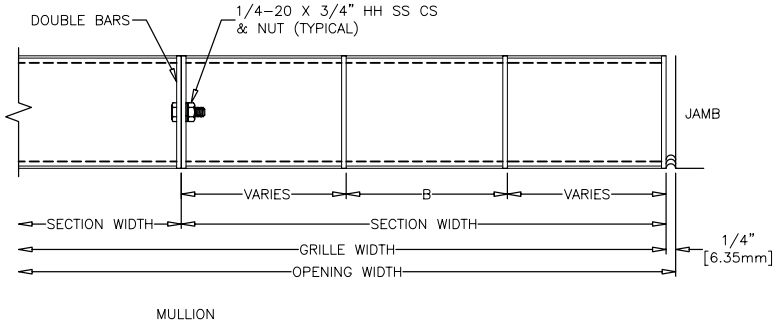
All horizontal, vertical and perimeter frame members shall be joined with slotted or tabbed connections. Where possible, connections shall be secured with fillet welds concealed from view, unless the size of the grille makes bolted connections between grille sections necessary. Each weld shall be manufactured with the Pulsed Gas Metal Arc Welding (GMAW Mig) process. Intermediate connections shall be intermittently joined with a 1 in. (25.4 mm) long fillet weld with a minimum 3/16 in. (4.76 mm) leg. Frames shall be joined at each corner with a full-length GMAW fillet weld with a minimum 3/16 in. (4.76 mm) throat.

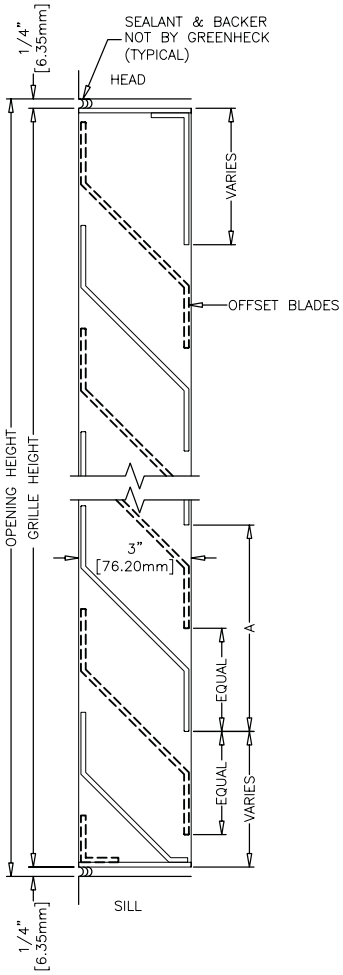
Products

Architectural grilles shall be Greenheck Inverted Grilles as follows:

- Material: Fabricated Aluminum, Alloy 5052-H32
- Material Thickness: Specify 0.081 in. (2.06 mm) to 0.125 in. (3.18 mm), or as indicated.
- Grille Depth: Specify 3 in. (76.2 mm) to 6 in. (152.4 mm), or as indicated.
- Perimeter Frame: Specify Aluminum Bar, Channel or Tube, or as indicated.
- Horizontal Bar Angle: Specify 45-degrees.
- Horizontal Blade Spacing: Specify 5½ in. (139.7 mm) to 11 in. (279.4 mm), or as indicated.
- Vertical Bar Spacing: Specify 9 in. (228.6 mm) to 48 in. (1,219.20 mm), or as indicated.

DETAIL DRAWINGS





A - Horizontal Blade Spacing
Standard spacing 5½ in. (139.7 mm) to maximum 11 in. (279.4 mm) center spacing.

B - Vertical Bar Spacing
Specify vertical members on minimum 9 in. (228.6 mm) to maximum 48 in. (1,219.2 mm) center spacing.

FINISHES

Finish Type	Description/Application	Color Selection	Standard Warranty (Aluminum)
2-coat 70% KYNAR 500®/HYLAR 5000® AAMA 2605 – Dry film thickness 1.2 mil. (AKA: Duranar®, Fluoropon®, Trinar®, Flouropolymer, Polyvinylidene Fluoride, PVDF2)	***"Best."*** The premier finish for extruded aluminum. Tough, long-lasting coating has superior color retention and abrasive properties. Resists chalking, fading, chemical abrasion and weathering.	**Standard Colors:** Any of the 24 standard colors shown can be furnished in 70% or 50% KYNAR 500®/HYLAR 5000® or Baked Enamel. **2-Coat Mica:** Greenheck offers 9 standard 2-coat Mica colors. Other colors are available. Consult Greenheck for possible extra cost when selecting non-standard colors or special finishes.	10 Years (Consult Greenheck for availability of extended warranty)
2-coat 50% KYNAR 500®/HYLAR 5000® AAMA 2604 – Dry film thickness 1.2 mil. (AKA: Acroflur®, Acrynar®)	***"Better."*** Tough, long-lasting coating has excellent color retention and abrasive properties. Resists chalking, fading, chemical abrasion and weathering.		5 Years
Baked Enamel AAMA 2603 – Dry film thickness 0.8 mil. (AKA: Acrabond Plus®, Duracron®)	***"Good."*** Provides good adhesion and resistance to weathering, corrosion and chemical stain.		1 Year
Integral Color Anodize AA-M10C22A42 (>0.7 mil)	"Two-step" anodizing is produced by following the normal anodizing step with a second, colorfast process.	Light, Medium or Dark Bronze; Champagne; Black	5 years
Clear Anodize 215 R-1 AA-M10C22A41 (>0.7 mil)	Clear, colorless and hard oxide aluminum coating that resists weathering and chemical attack.	Clear	5 years
Clear Anodize 204 R-1 AA-M10C22A31 (0.4-0.7 mil)	Clear, colorless and hard oxide aluminum coating that resists weathering and chemical attack.	Clear	1 Year
Industrial coatings	Greenheck offers a number of industrial coatings such as Hi-Pro Polyester, Epoxy, and Permatector®. Consult a Greenheck Product Specialist for complete color and application information.		Consult Greenheck
Mill	Materials may be supplied in natural aluminum or galvanized steel finish when normal weathering is acceptable and there is no concern for color or color change.		n/a

Finishes meet or exceed AAMA 2605, AAMA 2604, and AAMA 2603 requirements. Please consult www.greenheck.com for complete information on standard and extended paint warranties. Paint finish warranties are not applicable to steel products.

GREENHECK®

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