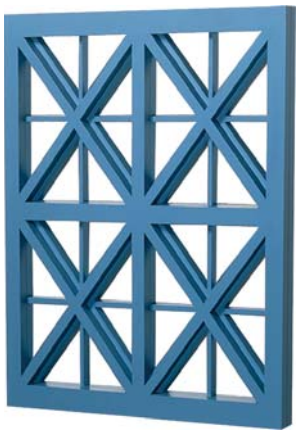
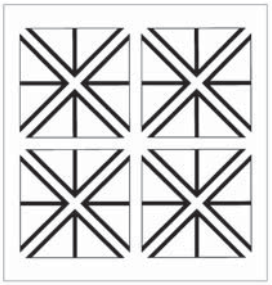
GREENHECK

Grille
GEOMETRIC

Application and Design

Greenheck Geometric 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. Geometric Grilles are manufactured from aluminum plate in single or multiple components from 0.250 in. (6.35 mm) to 0.500 in. (12.70 mm) thick that enable precise reproduction of intricate or complex geometric patterns. If desired, multiple plate thicknesses may be joined by welding to yield reveals. Where required, optional perimeter channel or tube frames lend rigidity to the assembly and may facilitate installation. Geometric Grilles may be supplied in virtually any geometric pattern that can be detailed in AutoCAD and enable optimum flexibility in design.





ELEVATION VIEW

Standard Construction

Material. . . . . .Aluminum Plate, Alloy 5052-H32
Material Thickness . . . . . .0.250 to 0.500 in. (6.35 to 12.70 mm)
Grille Depth (no frame). . . . . .0.250 to 1 in. (6.35 to 25.4 mm)
Grille Depth (with frame). . . . .2 to 6 in. (50.8 to 152.4 mm)
Perimeter Frame . . . . . .None, Aluminum Channel or Tube
Geometric Pattern . . . . . .As Detailed by the Designer
Number of Reveals . . . . . .None to Multiple; As Detailed by the Designer

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 Geometric 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

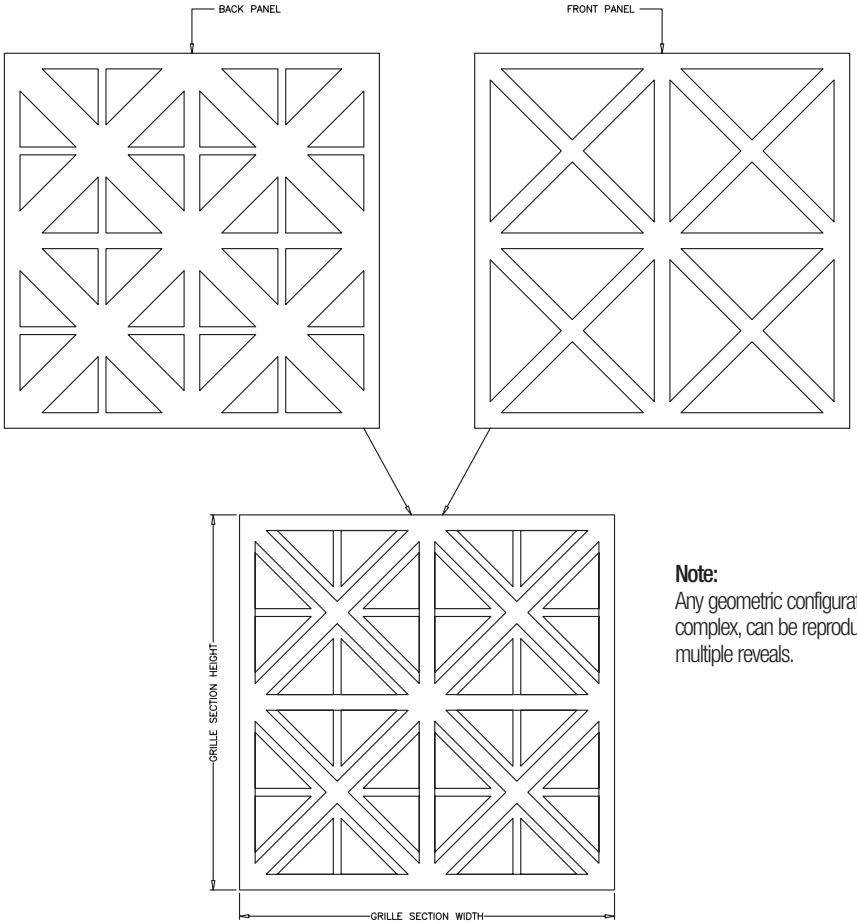
All horizontal, vertical and perimeter frame members shall be joined with slotted or tabbed connections. Where possible, connections shall be secured with fillet welds concealed from view, unless the size of the grille makes bolted connections between grille sections necessary. Each weld shall be manufactured 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 Geometric Grilles as follows:

- Material: Aluminum Plate, Alloy 5052-H32
- Material Thickness: Specify 0.250 in. (6.35 mm) to 0.500 in. (12.70 mm), or as indicated.
- Grille Depth: Specify 0.250 in. (6.35 mm) to 6 in. (152. 4 mm), or as indicated.
- Perimeter Frame: Specify No Frame, Aluminum Channel or Tube, or as indicated.
- Number of Reveals: Specify number of material thicknesses required or as indicated.
- Geometric Pattern: As indicated on Contract Drawings.

DETAIL DRAWINGS



EXTERIOR ELEVATION

Note:
Any geometric configuration, whether simple or complex, can be reproduced to exacting detail with multiple reveals.

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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