



SECURITY BARS FOR DUCT OPENINGS

SECURITY BARS / BURGLAR BARS

Custom fabricated security bar assemblies for duct openings, roof curbs, wall penetrations, and high-security HVAC applications.

- Used to discourage people, animals, or large debris from entering duct systems through exposed rooftop or wall openings.
- Typically built with a steel perimeter frame and 1/2" rods welded at 6" on center, with custom spacing available when quoted.
- Most often shipped loose for installation into roof curbs, curb adapters, wall penetrations, or duct openings by others.

MATERIAL	Mild Steel
ROD LAYOUT	1/2" at 6" O.C.
FINISH	Raw / optional coating

CONSTRUCTION STANDARD

Application	Security bar assemblies for high-security duct openings, roof curbs, wall penetrations, equipment openings, and exposed HVAC intake or exhaust locations.
Standard material	Mild steel is standard. Stainless steel and aluminum can be quoted when corrosion resistance, weight, or project requirements call for alternate material.
Frame options	Frames can be fabricated from flat bar, angle, or sheet metal to match the opening, installation method, and required bearing surface.
Rod layout	1/2" rods at 6" on center are standard. Rod spacing, direction, clear opening, and frame depth should be confirmed before release.
Welding	Ends, corners, rod intersections, and frame joints are MIG welded for a rigid welded assembly unless another weld process is quoted.
Finish	Security bars are typically supplied raw/uncoated. Paint, powder coating, galvanizing, heat treating, or case hardening can be quoted when required.
Quality check	Security bar assemblies receive visual inspection before release. Code, security rating, structural approval, and field installation are by others unless quoted.

BUILD QUALITY



Made to spec

Built to released opening size, frame type, and rod layout.



Built tough

Welded bar construction for exposed security openings.



Quality checked

Welds and frame fit receive visual inspection before release.



Opening ready

Shipped loose for field installation in curbs or penetrations.

FABRICATION CAPABILITIES

Bar assemblies	Rectangular security bars, curb burglar bars, wall penetration bars, duct opening bars, equipment opening bars, and special frame sizes.
Frame styles	Flat bar frames, angle frames, sheet metal frames, flanged frames, drop-in frames, and custom mounting faces when shown or quoted.
Rod layouts	Standard 1/2" rods at 6" on center, custom rod spacing, cross-bar layouts, divided panels, and reinforced sections.
Materials	Mild steel standard, with stainless steel or aluminum options available when quoted.
Security details	Heat treating, case hardening, finish coating, bird screen, and special installation hardware can be coordinated when specified.
Release support	Built from released dimensions, templates, sketches, field measurements, or drawing packages with installation responsibilities clearly identified.

BUILD OPTIONS

Standard rod

1/2" round rods are standard for burglar bar assemblies unless another rod size is quoted.

Frame type

Flat bar, angle, or sheet metal frames can be selected to match the opening and attachment method.

Finish options

Raw steel is standard. Paint, powder coating, galvanizing, stainless steel, or aluminum can be quoted.

Bird screen

Bird screen can be added over the bar assembly when the opening also needs pest or debris control.

CONFIGURATION OPTIONS



FLAT BAR

Low profile

Simple welded perimeter frame for many duct and curb openings.



ANGLE

Mounting edge

Angle frames provide a stronger mounting face where the opening needs it.



SHEET METAL

Integrated frame

Formed frames can coordinate with curb, adapter, or duct construction.



SCREEN

Bird screen

Optional screen can be added when pest control is part of the scope.

OPTIONAL ACCESSORIES

Bird screen

Wire screen can be added over the bar grid for pest or debris control.

Coatings

Paint, powder coating, galvanizing, or special coating requirements where quoted.

Hardening

Heat treating or case hardening can be quoted when the project requires it.

Custom details

Mounting tabs, drilled holes, labels, piece marks, shipping splits, and special hardware.

REQUIRED FOR QUOTE / RELEASE



Opening width, length, quantity, frame type, and required clear opening or outside frame dimensions.



Approved drawing, sketch, curb/duct opening detail, wall penetration detail, or verified field dimensions.



Rod size, rod spacing, rod direction, bird screen requirement, and whether the assembly ships loose or installs into another product.

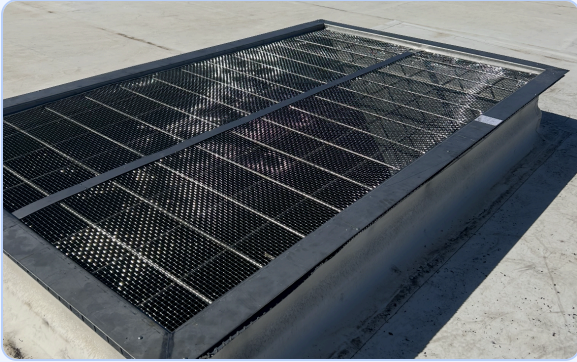


Material, finish, coating, galvanizing, powder coating, hardening, stainless, or aluminum requirements.



Mounting face, hardware, drilled holes, piece marks, shipping splits, and inspection requirements.

APPLICATIONS & DETAILS



APPLICATION DETAIL

Security opening protection



Built for roof curbs, wall penetrations, and duct openings where access through the duct system must be restricted. Frame size, clear opening, rod spacing, attachment method, and integration with adjoining duct or curb construction are coordinated to the release.

APPLICATION DETAIL

Standard build



Typical construction uses a flat bar, angle, or sheet metal frame with 1/2" rods welded 6" on center. Alternate rod layouts, heavier frames, screens, finishes, and mounting provisions can be evaluated when identified in the quoted scope.

ROD LAYOUT

1/2" at 6" O.C.

FRAME

Flat bar / angle / formed

WELDS

Ends, corners, intersections

- Opening size and required clear opening.
- Frame style and mounting face.
- Finish, screen, hardware, and security requirements.

APPLICATION DETAIL

Quote / release details



Confirm the opening, attachment method, finish, screen requirements, and whether the assembly ships loose or installs into another product. Orientation, clear dimensions, surrounding construction, and included anchors or hardware should be explicit before fabrication.

NOT INCLUDED UNLESS QUOTED

- Installation, field welding, anchoring, fastening, roofing, wall penetration work, or field modifications unless quoted.
- Engineering, security rating, detention rating, permits, inspections, AHJ approval, or listed-system certification.
- Hardware, coatings, galvanizing, heat treating, bird screen, field measuring, or rework from changed release dimensions unless quoted.

SCOPE & RESPONSIBILITY

Code note: Security bar and burglar bar assemblies may be governed by project specifications, security requirements, mechanical code, local code, building code, and AHJ direction. Empire fabricates the bar assembly to released dimensions and quoted scope; final security requirement, code interpretation, structural approval, installation method, anchorage, and field acceptance remain the responsibility of others unless expressly included.

READY TO QUOTE?



Let's get your project moving.

Send drawings, sketches, photos, or field measurements. Empire is ready to go to work for you.

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