



MECHANICAL LOCK SEAM DUCTWORK

STANDARD HVAC DUCTWORK

Mechanically seamed rectangular G90 galvanized ductwork for standard HVAC air distribution, return, exhaust, and equipment connections.





- Best for rectangular HVAC duct systems where Pittsburgh lock seam construction and standard transverse connections are acceptable.
- Offered in 26 ga through 18 ga G90 galvanized steel; heavier gauges or continuous welded seams should move to welded galvanized duct.
- Confirm connection type, liner/insulation, seal class, access openings, and face-to-face dimensions before release.

MATERIAL	G90 Galvanized Steel
GAUGE RANGE	26 ga - 18 ga
CONSTRUCTION	Pittsburgh lock seam

CONSTRUCTION STANDARD

Application	Rectangular galvanized ductwork and fittings for HVAC supply, return, exhaust, rooftop equipment connections, and standard air distribution systems.
Material	G90 galvanized sheet steel is standard unless another coating requirement is listed on the quote.
Gauge range	Lock seam galvanized duct is offered from 26 gauge through 18 gauge. Heavier gauges are typically quoted as welded galvanized duct.
Seam construction	Pittsburgh / mechanical lock seam construction. This is a formed duct product, not a fully welded duct system.
Straight sections	Produced in nominal duct sections and field-fit lengths as released. Connection style affects face-to-face dimensions and should be selected before fabrication.
Connection options	Raw ends with couplers, slip-and-drive, TDC / Ductmate, and angle rings are available as shown or quoted.
Insulation options	Fiberglass liner, rigid duct board insulation, and Armaflex options are available for acoustic or thermal protection when quoted.
Quality check	Duct sections and fittings receive visual inspection before release. Leak testing, pressure testing, or certified inspection are by others unless quoted.

BUILD QUALITY

 Made to spec Built to released dimensions, gauge, liner, and connection details.	 Built tough G90 galvanized duct formed for standard HVAC service.	 Quality checked Duct sections and fittings receive visual inspection.	 Lock seam Pittsburgh seam construction for rectangular ductwork.
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FABRICATION CAPABILITIES

Duct sections	Rectangular galvanized straight duct, field-fit pieces, risers, drops, and custom lengths.
Fittings	Rectangular galvanized elbows, radius bends, offsets, tapers, reducers, transitions, branches, and tees.
Connections	Raw ends with couplers, slip-and-drive, TDC / Ductmate, angle rings, equipment transitions, collars, curb adapters, and roof penetration fittings are available.
Field-fit work	Short sections, piece-marked runs, and coordinated connection faces.
Shop details	Tabs, brackets, companion flanges, angle frames, reinforcement, and special flange details when requested.
Release support	Built from released dimensions with connection type, liner requirements, seal class, access openings, and piece marks coordinated before fabrication.

LINER & INSULATION

Fiberglass liner

Acoustic or thermal fiberglass liner is available in 1/2" through 2" thicknesses when specified.

Rigid duct board

Rigid duct board insulation can be quoted where the project needs additional thermal or acoustic protection outside the normal liner scope.

Armaflex

Armaflex options are available when the project requires flexible closed-cell insulation details.

Attachment

Liner is installed with water-based adhesive and spot welded liner pins unless another attachment method is quoted.

CONNECTION OPTIONS



COUPLERS

Raw ends

Raw ends with couplers for screw assembly.



S & DRIVE

Slip-and-drive

Standard rectangular duct connection for mechanical assembly.



TDC / DUCTMATE

Bolted seal

Bolted frame connections with gasket or butyl sealant when specified.



ANGLE RINGS

Custom pattern

Angle rings, frames, and bolt patterns to match the application.

OPTIONAL ACCESSORIES

Liner

Fiberglass liner, rigid duct board insulation, Armaflex, liner pins, adhesive, and exposed-edge details.

Access

Access doors, cleanout openings, inspection panels, and drain fittings.

Sealing

Gasket, butyl sealant, mastic, or seal class details where specified and quoted.

Custom details

Reinforcement, tabs, brackets, piece marks, angle rings, and special hardware.

REQUIRED FOR QUOTE / RELEASE

✓ Gauge, duct size, quantity, connection type, and required nominal or field-fit lengths.

✓ Approved drawing, sketch, or verified field dimensions with airflow/orientation noted.

✓ Connection details: raw ends with couplers, slip-and-drive, TDC / Ductmate, angle rings, bolt patterns, or companion flange needs.

✓ Liner or insulation type, thickness, exposed edges, access needs, and any acoustic or thermal requirements.

✓ Piece marks, access openings, reinforcement, pressure class, seal class, and any testing requirements.

APPLICATIONS & DETAILS



APPLICATION DETAIL

Shop-fabricated sections



Rectangular duct sections and fittings are built from released sizes, connection style, and field-fit requirements. Straight duct, elbows, offsets, transitions, taps, and equipment connections can be coordinated as one marked fabrication package.

APPLICATION DETAIL

Liner and connection details



Fiberglass liner, access openings, TDC / Ductmate, S & Drive, and other connection details can be coordinated before release. Confirm liner thickness, exposed-edge treatment, reinforcement, pressure class, and included gaskets or hardware.



APPLICATION DETAIL

Ready for field assembly



Piece marks, field-fit lengths, and coordinated connection faces help the duct package move cleanly from shop to installation. Staging by system, floor, area, or release can support pickup, delivery, and efficient field assembly when requested.

NOT INCLUDED UNLESS QUOTED

- Installation, hoisting, rigging, roofing, roof penetration work, or field sealing unless quoted.
- Engineering, permits, inspections, balancing, cleaning, field finish touch-up, or listed-system certification.
- Leak testing, pressure testing, fire wrap, fire-rated enclosure, gaskets, sealant, hardware, companion flanges, or rework from changed release dimensions unless quoted.

SCOPE & RESPONSIBILITY

Code note: Galvanized lock seam duct systems may be governed by mechanical code, local code, project specifications, pressure class, liner requirements, material/coating requirements, and AHJ requirements. Empire fabricates duct and fittings to released dimensions and quoted scope; final system design, material selection, installation method, field sealing, insulation requirements, clearances, balancing, and 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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