



UNITED STEEL PRODUCTS

# ALUMINUM ROLLING GRILLES MODEL 390



## HIGHLIGHTS

- Solid construction
- Torsion spring counterbalance
- 5/16" aluminum rods
- Poly-carbonate vision inserts
- End to End Hinged Panels
- Tubular bottom bar
- Aluminum guides
- Track bolt covers
- Light weight design
- Anodized finishes
- Protects & Displays Merchandise

## SPECIFICATIONS

**Furnish** Rolling Lexan Grilles, series 390 as manufactured by "USP" complete with curtain, hood, guides, counterbalance and options as specified.

### OPERATION

- manual lift
- chain hoist using gear reduction and hand chain
- removable hand crank using gear reduction
- internal or external industrial motors

**Curtain** construction shall be of 2" x 2-1/2" inch truss like aluminum panels spaced around 24 inch wide polycarbonate inserts. Panels connected with an aluminum hinge 3" on center. All exposed metal to be aluminum. Bottom of grill shall be provided with a tubular aluminum bottom bar. Bottom bar to house locking mechanisms.

**Bottom bar** to be heavy duty 2" x 3" extruded aluminum tubular bottom bar. Designed to minimize deflection for large openings. Upper section interlocks to vertical links. Lower section will accept (optional) internally installed cylinder locks.

**Locking** for manual and crank operated grilles to be cylinder locks mounted inside the bottom bar. Gearing within motors to be self locking. Motorized grilles with locks require track mounted interlocks or a H operator with a lock sensor.



**Spring counterbalance** is to be housed in a steel pipe of the appropriate diameter and wall thickness as to support curtain.

Deflection shall be limited to a maximum of .03" per ft. of door width. Springs are to consist of helical torsion types designed to meet a 25% load factor. Safety factor allows for safe operation, ease of use, and longer spring life. Springs are to be grease packed and anchored, using a cast iron anchor, to a cold rolled steel inner shaft. Spring tension shall be fully adjustable from outside of end bracket plate. To insure smooth operation end bracket plates shall contain sealed ball bearings to minimize wear of pipe shaft.

**End bracket** plates shall consist of steel plate no less than 3/16" thick. Bracket plates are to house pipe shaft and counterbalance assembly. Shaft is attached to plate by sealed ball bearings fitted onto plate.

**Guides** shall consist of extruded aluminum. The guide depth shall be of a length adequate to provide for proper curtain penetration. Brush pile inserts at the throat of the guides to reduce noise and act as a wearing surface. Locking channels at the guide edge prevent grille from being forced out of the guide.

**Hoods** shall consist of a minimum of #24 gauge hot dipped galvanized steel with a baked on grey or bronze polyester enamel coating. Hoods are designed to protect and house counterbalance assembly. To prevent hood sag intermediate supports shall be furnished as required.

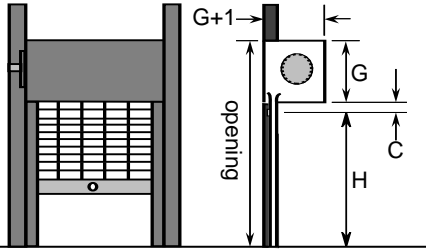
**Finish** all non-galvanized surfaces shall receive a shop coat of rust inhibiting primer. Aluminum to have natural mill, or optional clear anodized, or bronze anodized finish. Stainless steel to have #2b or #4 finish. Field painting not included in this section.

**Installation** to be by USP or by an authorized dealer.

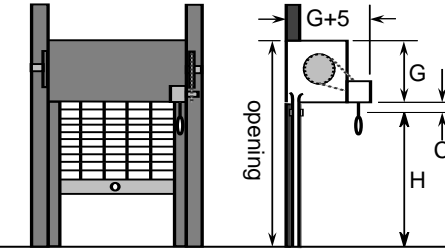
**Options** • Consult Factory •

# C L E A R A N C E   D E T A I L S   3 9 0   S E R I E S

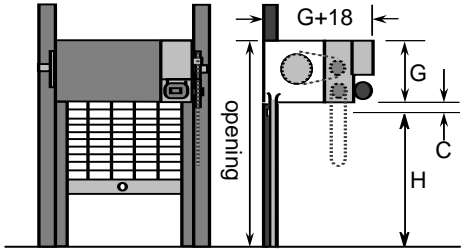
## MANUAL OPERATION



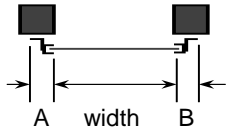
## CRANK / CHAIN OPERATION



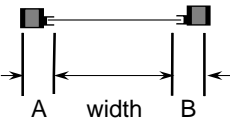
## MOTOR OPERATION



## FACE OF WALL

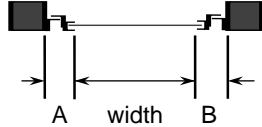


## TUBE



Note: add 1" to A & B when using 4x4 tubes, when over 20'

## BETWEEN THE JAMBS



Note: add 2" to B when using a chain hoist.

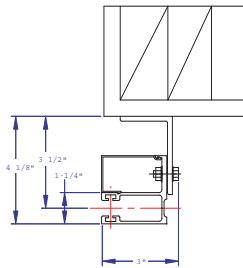
| WIDTH          | A   | B   | C |
|----------------|-----|-----|---|
| to 18'6"       | 6   | 6   | 6 |
| 18'6" to 24'6" | 6.5 | 8.5 | 6 |
| 24'6" to 36'6" | 7   | 9   | 6 |

| HEIGHT         | G  |
|----------------|----|
| to 9'6"        | 16 |
| 9'6" to 11'6"  | 17 |
| 11'6" to 13'6" | 18 |
| 13'6" to 16'6" | 20 |
| 16'6" to 19'6" | 22 |
| 19'6" to 22'6" | 24 |

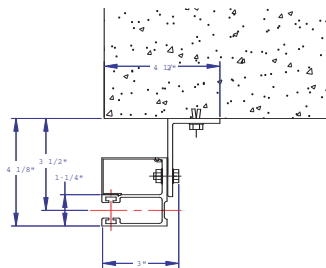
Where clearances are critical, dimensions can be reduced. Refer inquiries to our Engineering Department.

Self supporting structural steel tube members are supplied with USP grilles when specified. Tubes permit the installation of grilles independent of adjacent construction. The tubes are anchored to the floor slab, and to steel beams or joists above.

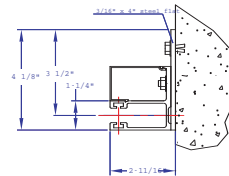
## E-MOUNT



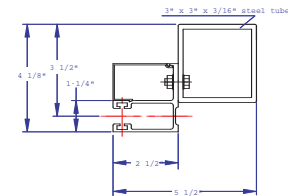
## Z-MOUNT



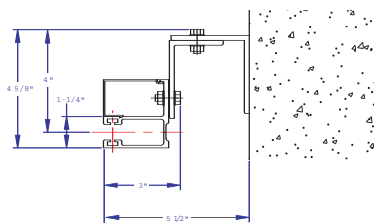
## BETWEEN THE JAMBS



## TUBE MOUNT



## BETWEEN THE JAMBS (CHAIN/MOTOR OPERATION)



## GRILLE FINISH

- MA** Mill finish aluminum
- CA** Clear Anodized
- BRA** Bronze Anodized
- BLA** Black Anodized
- SS** Stainless Steel

## PANIC RELEASE LEVER:

Model LD-02515 allows quick release of a rolling grille in the event of an emergency. Upon activation grille will open approximately half way. User then pushes the grille to the full open position. Panic releases can only be used in conjunction with, DJ, DHJ, OPERA HJ.



## OPERATORS



Models DJ, DHJ, HJ, UL listed, belt drive operator, horsepower as recommended by USP. Provide open drip-proof motor, removable without affecting auxiliary hand chain operation or setting of limit switches; auxiliary hand chain operator interlock; UL listed thermal overload protection; rotary limit switches; transformer with 24 v control secondary; and all integral electrical components prewired to terminal blocks. Operator may have a built-in lock sensor to prevent damage to grille when bottom bar lock is engaged and a disengage device to allow the door to open in an emergency.

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