# PULL OUT A-J MANUFACTURING SPECIFICATION SECTION

**(Note: Where you have a specification option, it is shown below in parenthesis)**

**All** **Material and Finish**
The material and finish for all stainless steel grilles, registers and diffusers specified in this section shall be type 304 (316) stainless steel with #3 satin polish finish (mill finish). All dampers, where required, shall be type 304 (316) stainless steel with mill finish.

**#1** **Model: SS-LCD – Fixed Louver Face, Fixed Discharge Pattern Ceiling Supply Diffuser**
Square neck or rectangular – Style 1 Surface mount, Style 2 for T-Bar

Stainless Steel ceiling diffusers shall be A-J model SS-LCD with square or rectangular inlet. (A stainless steel transition piece shall be provided to facilitate attachment of round duct.) The inner core assembly shall consist of fixed deflection louvers in 1, 2, 3 or 4-way horizontal discharge patterns, as indicated on the plans. Style 1 diffusers for surface mount shall have countersunk screw holes and shall be provided with #8 x 1-1/4" stainless sheet metal screws. Style 2 diffusers for lay-in mounting shall have a nominal 24" x 24" stainless steel face to fit a standard T-bar opening. (Opposed blade volume damper shall be constructed of 20 gauge 304 (316) mill finish stainless steel.)

**#2** **Model: SS-MLCD – Modular Core Ceiling Diffuser**
Square neck – Style 1 Surface mount, Style 2 for T-Bar

Stainless Steel ceiling diffusers shall be A-J model SS-MLCD with square inlet. (A stainless steel transition piece shall be provided to facilitate attachment of round duct.) The inner core assembly shall consist of four modular, removable, stainless steel cores. The throw pattern shall be field adjustable; 4-way, 3-way, 2-way opposite, 2-way corner or 1-way, as indicated on the plans. Style 1 diffusers for surface mounting shall have countersunk screw holes and shall be provided with #8 x 1-1/4" stainless sheet metal screws. Style 2 diffusers for lay-in mounting shall have a nominal 24" x 24" stainless steel panel to fit a standard T-bar opening. (Opposed blade volume damper shall be constructed of 20 gauge 304 (316) mill finish stainless steel.)

**#3** **Model: SS-DRL – Drum Louver, Sidewall Supply**
Rectangular neck – Style 1 Surface mount

Stainless steel sidewall drum louver shall be A-J model SS-DRL. Outer borders shall be 1_" wide and shall be constructed of roll-formed 18 gauge stainless steel. Screw holes shall be countersunk for a neat appearance. Drum shall be constructed of heavy gauge stainless steel and shall rotate a minimum of 25° up and down from centerline of the diffuser. Heavy stainless steel blades shall be individually adjustable. (Opposed blade volume damper shall be constructed of 20 gauge 304 (316) mill finish stainless steel and must be operable from the face of the drum louver.)

**#4** **Model: SS-150 – Single Deflection Grille (Register)**
Square or rectangular neck, one set of moveable bars, _" spacing – Style 1 Surface mount

Stainless steel supply grilles shall be A-J Model SS-150H (SS-150V) with horizontal (vertical) face bars of hollow airfoil design, spaced on _" centers. Each bar must be pivoted at the face to give a uniform aligned appearance regardless of the blade angle and shall be individually adjustable without affecting the setting of any other bar. Construction shall be of 304 (316) stainless steel with a 1-3/8" wide border on all sides. Screw holes shall be countersunk for a neat appearance. Corners shall be welded with full penetration resistance welds. (Opposed blade volume damper shall be constructed of 20 gauge 304 (316) mill finish stainless steel and must be operable from the face of the grille.)

**#5** **Model: SS-250 – Double Deflection Grille (Or Register with OBD)**
Square or rectangular neck, two sets of moveable bars, _" spacing – Style 1 Surface mount with OBD

Stainless steel double deflection supply register shall be A-J Model SS-250H (S250) with horizontal (vertical) face bars of hollow airfoil design, spaced on _" centers. Each bar must be pivoted at the face to give a uniform aligned appearance regardless of the blade angle and shall be individually adjustable without affecting the setting of any other bar. Construction shall be of 304 (316) stainless steel with a 1-3/8" wide border on all sides. Corners shall be welded with full penetration resistance welds. (Opposed blade volume damper shall be constructed of 20 gauge 304 (316) mill finish stainless steel and must be operable from the face of the register.)

**#6** **Model: SS-SEC-3 – Security Bar Grille (Register)**
Square or rectangular neck, fixed bars, _" spacing, 14 gauge sleeve

Stainless steel bar type security grille shall be A-J model SS-SEC-3 with a 14-gauge faceplate, 1" flange and continuously welded corners. Bars are 1/8" x _" on _" centers with penetrating 14-gauge vertical support bars on 6" centers. Each bar is individually welded to the 14-gauge (12-gauge, 10-gauge) stainless steel sleeve. Sleeve shall be of the length specified on the plans with welded seams and welded faceplate. Security grille shall be factory set with bars at 0°, (15° or 45°) deflection. (A screen of 10 gauge x 3/8" #2 mesh woven stainless steel wire shall be behind face bars.) Rear angle frame shall be 1" x 1" x 1/8" stainless steel completely assembled for field welding. (Opposed blade volume damper shall be constructed of 20 gauge 304 (316) mill finish stainless steel and must be operable from the face of the drum louver.)

**#7** **Model: SS-550 – Single Fixed Bar Return Grille (Register)**
Square or rectangular neck, fixed horizontal or vertical bars, 0° (or 45°) angle, 3/4" spacing – Style 1 surface mount

Stainless steel return grilles (registers) shall be A-J Model SS-550H or (SS-550V) with horizontal (vertical.) Face bars of hollow airfoil design, 304 (316) fixed on _" centers and parallel to the long (short) dimension of the grille. Construction shall be of stainless steel with a 1-3/8" wide border on all sides. Screw holes shall be countersunk for a neat appearance. Corners shall be welded with full penetration

resistance welds. (Opposed blade volume damper shall be constructed of 20 gauge 304 (316) mill finish stainless steel and must be operable from the face of the register.)

**#8 Models: SS-HFG – Single Fixed Bar Hinged Filter Return Grille (Register)**
Square or rectangular neck, fixed horizontal or vertical bars, 0° or 45° angle, 1" spacing – Style 1 surface mount

Stainless steel hinged filter return grilles (register) shall be A-J Model SS-HFG H or (SS-HFGV) with horizontal (vertical) face bars of hollow airfoil design fixed on 1" centers and parallel to the long (short) dimension of the grille. Construction shall be stainless steel with a 1-3/8" wide border on all sides. Screw holes shall be countersunk for a neat appearance. The grille (register) is secured to the filter frame with low profile Phillips-head captive fasteners. Corners shall be welded with full penetration resistance welds. Grilles (registers) shall come with filter clips for standard 1" (2") filter depth. (Opposed blade volume damper shall be constructed of 20 guage 304 (316) mill finish stainless steel and must be operable from the face of the register.)

**#9 Model: SS-DG – Louvered Door Grille**
Square or rectangular, fixed horizontal or vertical louver blade, 45° angle, 1" spacing – Style 1 surface mount

Stainless steel double-sided louvered door grilles shall be A-J Model SS-DG with horizontal 1" blade spacing. The 1" louvers shall be fixed on 1" centers and shall be available parallel to the long (or short) dimension for limited vision in wood or hollow metal doors. Construction shall be of all stainless steel with a 1-3/8" wide border on all sides and shall fit 1-3/4" or thicker doors. Screw holes shall be countersunk for a neat appearance. Corners shall be welded with full penetration resistance welds.

**#10 Model: SS-LBG – Bar Grille (Or register with OBD)**
Square or rectangular, fixed horizontal bar, 0° angle, 3/8" spacing – Style 1 surface mount

Stainless steel bar grilles (or register) shall be A-J Model SS-LBG 3/8" with horizontal blade spacing. The 1" long airfoil blades shall be set at 0° on 3/8" centers allowing _" spacing between blades. Blades shall be reinforced on 8" centers. Construction shall be of all stainless steel with a 1-3/8" wide border on all sides. Screw holes shall be countersunk for a neat appearance. Corners shall be welded with full penetration resistance welds. Grilles may be used for supply or return air as specified on the plans. (Opposed blade volume damper shall be constructed of stainless steel and must be operable from the face of the register.)

**#11 Model: SS-PERF – Perforated Return Grille (Or Register)**
Square or rectangular, Style 1 Surface mount, Style 2 for T-Bar

Stainless steel perforated return grille shall be A-J Model SS-PERF of the sizes shown on the plans. Grille shall have 3/16" round perforations on _" staggered centers allowing 51% free area. Construction shall be of all stainless steel with a 1-3/8" wide border on all sides and fits 1-3/4" or thicker doors. Screw holes shall be countersunk for a neat appearance. Corners shall be welded with full penetration resistance welds. (Opposed blade volume damper shall be constructed of stainless steel and must be operable from the face of the grille.)

**#12 Model: SS-SEC-6 – Maximum Security Grille (Or Register with OBD), Supply or Return**
Square or rectangular neck, 3/16" steel face plate, 2" x 2" holes, 3/16" steel sleeve

Stainless steel maximum security grille shall be A-J model SS-SEC-6 with a 3/16" stainless steel faceplate with 2" x 2" holes with 1" fret and 1" flange. A matching stainless steel backer plate shall be welded to the sleeve sandwiching a 10 gauge x 3/8" #2 mesh woven stainless steel screen behind the faceplate. Sleeve shall be of 3/16" stainless steel of the length specified on the plans with welded seams and stitch-welded to the faceplate. (Sleeves of other gauges shall be available if specified.) Rear angle frame shall be 1" x 1" x 3/16" stainless steel completely assembled for field welding. (Other gauges and sizes shall also be available if specified.) Opposed blade damper shall be constructed of stainless steel.

**#13 Model: SS-BG – Linear Bar Grille (Or Register with OBD)**
Square or rectangular, fixed horizontal bar, 0° angle, 3/8" spacing – Style 1 surface mount

Stainless steel bar grilles shall be A-J Model SS-LBG (3/8" blade spacing, horizontal) of the sizes and mounting types shown on the plans and outlet schedule. The 1" long airfoil blades are set at 0° on 3/8" centers allowing _" spacing between blades. Blades shall be reinforced on 8" centers. Construction shall be of all stainless steel with a 1-3/8" wide border on all sides. Screw holes shall be countersunk for a neat appearance. Corners shall be welded with full penetration resistance welds. Grilles may be used for supply or return air as specified on the plans. (Opposed blade volume damper shall be constructed of stainless steel and must be operable from the face of the register.)

**#14 Model: S-44 – Stainless Steel Opposed Blade Damper**
Square or rectangular, face operating

Stainless steel opposed blade damper shall be A-J Model S-44 of the sizes shown on the plans. Damper shall be sturdy, 1-13/16" deep, constructed of 20 gauge stainless steel, and mill finish. Damper shall be fully adjustable and maintain position with airflow. The Screwdriver operating mechanism shall be accessible from the face of a diffuser or register.

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