Material

Unless otherwise noted, all material is either:

(CR) Cold-Rolled Steel, High Grade Commercial Quality, Low Carbon, ASTM-A1008
(HR) Hot Rolled Pickled & Oiled Steel, High Grade Commercial Quality, Low Carbon, ASTM-A1011
(GA) Galvanized G60 Steel, High Grade Commercial Quality, Low Carbon, ASTM-A653

Material is purchased to stringent quality standard based on dimensional tolerances for sizes, flatness, squareness, burr, and surface appearance.

Drawer Brackets

Design

Five (5) bracket heights are offered as standard. Each height is offered in two (2) standard widths and (2) standard depths (20 standard sizes total). Brackets are designed to be installed between two shelves inside of a shelving unit. A shelf must be placed between brackets if bracket kits are stacked.

Front Mounting Bracket

Two (2), 16 gauge CR double formed vertical members with shear formed tabs for attachment to shelving posts. Front mounting brackets incorporate square holes that are punched on 20mm (0.7874”) centers to accept the locating tabs of the drawer slides. An adjacent round hole is utilized to accept the screws that secure the drawer slides to the housing. There is also a 5/16” diameter hole for securing the bracket to the shelving post with a bolt and nut.

Rear Mounting Bracket

Two (2), 16 gauge CR triple formed vertical members with shear formed tabs for attachment to shelving posts. Rear mounting brackets incorporate square holes that are punched on 20mm (0.7874”) centers to accept the locating tabs of the drawer slides. A 5/16” diameter hole is punched for securing the bracket to the shelving post with a bolt and nut.

Top Trim Angle

A 20ga. Angle provided to conceal the gap between the upper shelf and the uppermost drawer. The angle is attached to the upper shelf using nylon panel clips.

Drawer

Design

Fifteen (15) drawer heights are offered as standard. Each height is offered in five (2) standard widths, and (2) standard depths (60 standard sizes total). The perimeter of a typical drawer features slots for locating partitions and dividers to segment the drawer’s interior into smaller compartments. Segments are on 0.799” centers. 36 wide drawers have 40 segments side-to-side, and 48 wide drawers have 55 segments side-to-side. 18 deep drawers have 17 segments front-to rear, and 24” deep drawers have 24 segments front-to-rear. The drawer consists of a body, front, back, two side ribs, two front/back ribs, a handle, and two zee rails.

Body

Drawer bodies are offered in four (4) different heights within a specific drawer width. The body is an 18 gauge CR box-formed pan. The body is pre-punched to accept the self-tapping screws for the attachment of partitions and dividers. The body features flanges at the front and rear that are resistance-welded to the drawer front and back.

Front
14 gauge CR flat, corner-chamfered plate. The front is pre-punched to accept the self-tapping screws of the drawer handle and the dimples of the handle end caps. The front is resistance-welded to the front, horizontal and vertical flanges of the drawer body.

Back
18 gauge CR formed strip. The back is resistance-welded to the rear, horizontal and vertical flanges of the drawer body.

Side Ribs
20 gauge CR multi-formed strips that are slotted on 0.799” centers to accept the flanges of partitions and dividers. One (1) side rib is resistance-welded to each side of the drawer body, creating a unique double-walled construction to provide increased drawer strength.

Front and Back Ribs
20 gauge CR multi-formed strips that are slotted on 0.799” centers to accept the flanges of partitions and dividers. One (1) rib is resistance-welded to the drawer front and one (1) rib is resistance-welded to the drawer back.

Handle
A clear anodized aluminum extrusion that features a unique “snagless” end cap design. The handle, without end caps, measures 20 3/8” in length for 36 wide drawers and 34 25/32” for 48 wide drawers. Handle end caps are molded from polyethylene material, are handed, and are colored to match the handle. These components interlock as a unit, and are pre-assembled to the drawer front at the factory using three (3), #10 self-tapping screws. The right-hand end cap features a slot through which both a rigid, 1” wide, 0.03” thick paper label and a 0.01” thick clear plastic strip can be inserted. Once fully inserted, they drop down and are held in place by a step inside the right-hand end cap. The paper label and clear plastic strip are shipped loose, and are labeled and inserted by the customer.

Zee Rails
14 gauge CR zee-formed members, one (1) right-hand and one (1) left-hand, that travel on the Delrin rollers of the drawer slide, and are resistance-welded to the underside of the drawer body. The zee rails feature pre-punched holes for attachment of drawer latch clips, and formed tangs that act as drawer stops.

Suspension

Design
The suspension system is designed to provide for full extension of any drawer at full rated load capacity. The suspension system consists of the drawer and drawer slide. The drawer slide is made of two (2) components; the cabinet profile, and the middle profile. Drawer stopping is accomplished by formed tangs that are located at specific points along the lengths of the drawer and drawer slide. Drawers can easily be removed, without the need of tools, by releasing the safety catch at the front of the middle profile of the drawer slide and lifting up on the leading edge of the drawer at full extension.

Performance
The drawer suspension system, under a full rated load of 400 pounds, will experience 3000 cycles without failure. A cycle is defined as full extension and return, with a maximum pull force no greater than 50 pounds. Full rated loading is defined as an equally displaced weight on the drawer body, having two (2) partitions screwed in place and located front to rear.

Drawer Slide
12 gauge CR full-extension, progressive-action drawer slide consisting of two (2) components; the cabinet profile, and the middle profile. The cabinet profile features two (2) mounting tabs which engage into the front and rear vertical members of the cabinet housing, a formed tang which acts as a drawer stop, and a pre-punched hole to allow for a #8, countersunk-head screw which secures the cabinet profile into position. The middle profile features six (6) self-lubricating Delrin rollers, integral drawer stops, and a safety catch which prevents the drawer from bypassing the drawer stops. Both the cabinet profile and middle profile are finished with a gray powder coating.

Finish

After fabrication, all steel parts are thoroughly cleaned, given a bonding and rust inhibitive phosphate treatment and then electrostatically sprayed with powder coat. All fasteners are zinc-plated.

Drawer Options

Partition
18 gauge GA multi-formed panel that is used for structural support of a loaded drawer, and to sub-divide the drawer interior into smaller compartments. Partitions are available in (2) widths and (2) lengths, equivalent to the interior drawer width and each length is available in four (4) heights, equivalent to the drawer body height (16 standard sizes total). Partitions feature slots that line up with the slots around the drawer interior for the installation of dividers. Partitions are installed by inserting their end flanges into the slots along the drawer perimeter and fastening their bottom flange into the pre-punched holes of the drawer bottom with #6 self-tapping screws (supplied).

Divider
20 gauge GA flanged plate that is used to sub-divide the drawer interior into smaller compartments. They are available in twenty-two (22) lengths of 3 segments through 24 segments, and each length is available in four (4) heights equivalent to the drawer body height (88 standard sizes total). Dividers are installed by inserting their end flanges into the slots between the drawer perimeter and a partition, or between partitions. Dividers over 14 segments feature an additional pre-punched bottom flange to be fastened into the pre-punched holes of the drawer bottom with #6 self-tapping screws (supplied). Dividers feature pre-printed part numbers for ease of customer identification.

Latch-In / Latch-Out
A device that provides a means to automatically latch individual drawers in both the closed and fully opened positions. Designed for release by rotating a knob, this option is recommended for non-static applications such as a mobile aisle shelving and for units in ships, vans, and other vehicular equipment. This device can be applied to any width drawer size and consists of a 1/4” diameter control rod with a 1” diameter, knurled aluminum knob, and a latching mechanism. The latching mechanism consists of a mounting bracket, cam and extension spring. It is fastened to the left, rear drawer rail with (2) #10-24 self-tapping screws. The control rod fits through a punched hole in the lower-left face of the drawer front. A momentary twist of the knob while opening a drawer, rotates the 14 gauge cam away from a notch in the top rear of the drawer slide. As the drawer travels forward, the cam rides along the length of the drawer slide until it engages in front of the drawer slide and automatically stops the drawer from being closed.
NOTE: *This option is only available on the left side of the drawer.*
This option is factory installed only.

Bottom Inserts
Three (3) styles of bottom inserts are offered for all drawer sizes. The green felt insert is 3/64” thick, the black non-slip polyester mesh insert is 1/8” thick, and the white, high-impact polystyrene plastic insert is 30 mil. thick.