



# *SafeStak Specifications*

## ***LIBRARY BUREAU STEEL***

### ***General Storage 4-Post Shelving System***

***DESIGN:*** Tool-less 4-Post assembly allowing 1" on center shelf height adjustment.

***SCOPE OF WORK:*** This specification covers materials of steel storage shelving in a 4-Post configuration as per illustration below. Unit heights, depths and accessories to be as indicated on floor plans, specifications or schedule of equipment. Where required, double-faced bookstack will be properly floor anchored or overhead secured and all wall or single-faced shelving to be secured to walls in an inconspicuous manner. Anchors to be determined by field conditions in accordance with local codes. Specific anchors not included as part of this specification.

***MATERIALS AND WORKMANSHIP:*** Only the finest materials and quality workmanship will be acceptable. Sheet metal to be class 1 cold or hot rolled and full pickled. Gauge (ga.) thicknesses are U. S. standard with the following minimum requirements:

1. Shelves – 18 gauge
2. Upright Columns – 16 gauge
3. Side Wedgelock Bracket – 16 gauge
4. Adjustable Wire Shelf Support – ¼" diameter
5. Base Toe Kick – 18 gauge
6. Optional Side and Back Panels – 20 gauge

***CAPACITY REQUIREMENTS:*** Size to customer specifications. 150-250 lbs. per shelf range depending on size.

***FINISH:*** In preparation for coating, each part is subjected to an intensive multi-phase cleansing process. This produces perfectly clean surfaces that will assure maximum finish adhesion. Next, the parts are electrostatically sprayed with dry thermosetting powder of the specified color. The powder particles receive a low amperage, high voltage positive charge that bonds them to the parts which are negatively charged by the monorail conveyor that moves them through the process. Finally, the coated parts pass through a 100-foot curing oven where the thermosetting powder melts, flows and fuses into a smooth, durable finish.

The powder coating process produces finishes with enhanced color richness due to more consistent and uniform application. They are also free of sags, drips, runs and bubbles. Powder finishes are more resistant to impact, abrasion, staining and corrosion than conventional paints. Powder coating is a dry, thermosetting process and does not require the use of solvents, it emits no volatile organic compounds (VOC), no liquid or solid waste, and is in accordance with EPA guidelines.

***COLOR:*** Color to be selected from manufacturer's standard (unless otherwise specified).

***TYPE OF SHELVING:*** Adjustable shelves interlock on four corner upright columns allowing a wide flexibility of sizes and accessory arrangement in any standard three-foot (36") wide section. (Sections 24" wide or 30" wide shall also be supplied as specified.)

# LBS 4-POST SYSTEM

Mounts Side to Side AND Back to Back  
Adjustable on 1" centers

OPTIONAL BACK OR SIDE  
CLOSED PANEL 20 Ga.

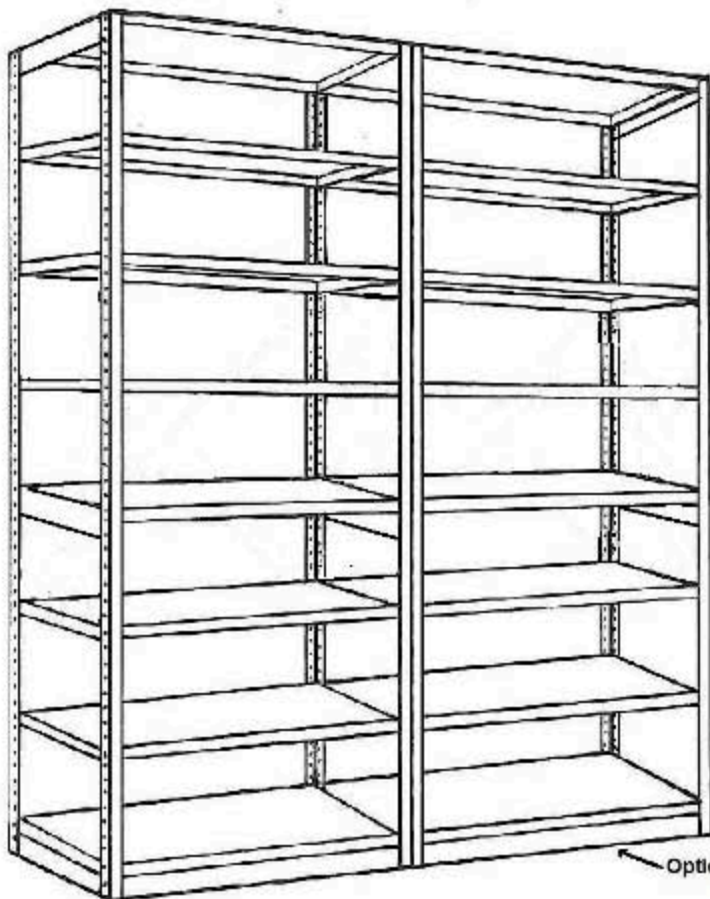
Shelf

18 Ga.  
Shelf

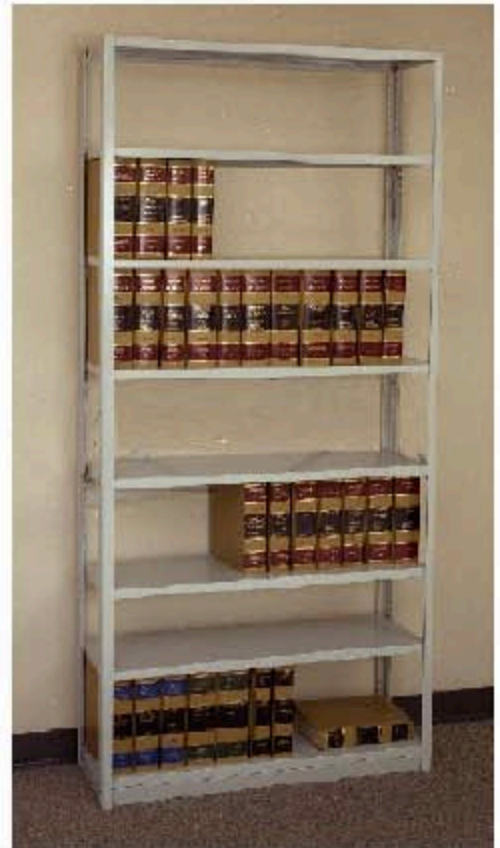
16 Ga. Upright

16 GAUGE SIDE  
WEDGELOCK  
BRACKET

1/4" Diameter  
Adjustable  
Wire Support



Optional Base Toe Kick - 18 Ga.



# LIBRARY BUREAU STEEL SPECIFICATIONS

## SafeStak

For Seismic Zones 0, 1 and 2A

### ***Bookstack General Specifications:***

***DESIGN:*** Sway Braced Construction. Bracket type, double faced or single faced with closed bases.

***SCOPE OF WORK:*** This specification covers all materials of library steel bracket type bookstack. Unit heights, depths and accessories to be as indicated on floor plans, specifications or schedule of equipment. Where required, double faced bookstack will be properly floor anchored and all wall or single faced shelving to be secured to walls in an inconspicuous manner. Anchors to be determined by field conditions in accordance with local codes. Specific anchors not included as part of this specification.

***MATERIALS AND WORKMANSHIP:*** Only the finest materials and quality workmanship will be acceptable. Sheet metal to be Class 1 cold or hot rolled and full pickled. Gauge (GA.) thicknesses are U. S. Standard with the following minimum requirements:

1. Shelves --- 18 gauge
2. Web stiffener --- 13 gauge
3. Base bracket --- 13 gauge
4. Top spreader --- 16 gauge
5. Sway Brace Diameter--- 6 gauge minimum
6. Adjustable shelf brackets --- 16 gauge
7. Upright columns --- 16 gauge

***CAPACITY REQUIREMENTS:*** Each shelf shall have a minimum clearance between brackets of 35-7/16" and support 50 pounds per linear foot minimum.

***FINISH:*** All parts shall be automatically washed and phosphate coated. Following a complete drying process, each part is to receive a finish coat of electrostatically applied powder paint polymer. The final finish must meet or exceed minimum requirements as specified by Library Technology Reports.

***COLOR:*** To be selected from manufacturer's 48 standard colors (unless otherwise specified).

***TYPE OF BOOKSTACK:*** Adjustable shelves hang on a central upright column in a cantilever manner allowing a wide flexibility of sizes and accessory arrangement in any standard three foot (36") wide section. (Sections 24" wide or 30" wide shall also be supplied as specified).

Following are component parts required:

- a) ***INITIAL UPRIGHT COLUMNS*** formed of not less than 16 ga. Into a channel shape with no less than 1/2 " stiffening flanges measuring 2" in the web and 1-3/16" at front and rear surfaces.

## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

Uprights are to be perforated with a series of 1/4" x 5/8" slots spaced 1" on vertical centers and located within 5/16" from the web. Every fifth and sixth slot to be shaped differently for ease of shifting adjustable shelves. Uprights must be designed to receive sway braces for maximum stability. All single-faced sections and double-faced sections receive two upright columns.

b) ***DOUBLE-FACED UPRIGHT ASSEMBLIES*** will consist of two uprights as described for the initial upright columns plus a 2-1/4" wide web stiffener of 13 gauge steel spot welded together. This will be supplied for units over 66" high; the spot welds will be approximately 11" apart. The space between the upright columns produced by the web stiffener provides a slip joint for the insertion of the base brackets and tie channel. Units 66" high and less use two upright columns bolted together with 3/8" machine bolts and nuts.

c) ***TOP TIE CHANNELS*** will consist of not less than 16 ga. Box formed 2-5/32" deep with 1-3/8" downward flanges formed 90 degree ends. Individual channels must be mechanically fastened to uprights with nuts and bolts.

d) ***WEB STIFFENERS***: Shall be 13 GA. 2-1/4" wide and approximately 7-1/2" shorter than uprights on all stacks over 66" high, keyed to engage base brackets to form a continuous structural member from floor to top of stack. Web is bolted between welded frames with 3/8" nuts and bolts.

e) ***BASE BRACKETS***: Shall be designed to fit between uprights. Material shall no less than 13 GA. Brackets to have a 90 degree flange at bottom to rest on floor with outer ends punched to receive leveling glides, when specified. Top and front edge of base brackets angled to match adjustable shelf brackets and to allow nesting adjustable shelves into base shelf area when desired.

f) ***CLOSED BASE SHELVES***: Shall be formed to meet industry performance standards of 50 pounds per foot without deflection in excess of 3/16". One piece construction designed to fit snugly around upright columns and base brackets without need of hardware fasteners. Front height shall be at least 3' and sides shall have stiffening flanges, designed to inter-member with base bracket slots.

g) ***SWAY BRACES*** combined with the welded SafeStak web stiffened column shall be provided as primary keys in meeting regulator requirements for seismic risk zones established by authority having jurisdiction. All double-faced ranges shall have diagonal sway braces installed between the uprights, every third section with a minimum of one pair per range to prevent longitudinal sway of the stack ranges. Sway braces to be 1/4" dia. (min.) steel rods, hooked into the web of stack uprights and provided with turnbuckles to insure uprights in stack ranges being held vertically plumb.

h) ***HARDWARE***: Shall be rust proof, cadmium or zinc plated or equal and shall be completely concealed from view in finished assembly with no projections to harm material or users.

i) ***SHELVES AND ACCESSORIES***: All flat, Tu-bar, divider and accessories may be used in any combination.

## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

***ADJUSTABLE FLAT TU-BAR SHELVES:*** Shall be same construction as regular adjustable shelves with added reinforced slot to receive Loc-Tite book supports. Loc-Tite book support to be 16 gauge 3-5/16" W x 1-7/8" D, (6" or 9" high as specified). Loc-Tite supports shall operate in similar fashion to a follower block providing maximum support for filed materials and designed to prevent unintentional release. These supports shall have 3/8" deep return flange to prevent knifing books and shall operate either above or below the shelf. Loc-Tite book supports not included with shelf, specify as required.

***ADJUSTABLE SHELVES:*** Shelves are one-piece, 18-gauge steel formed at both front and rear with three 90 degree bends. Each bend is slightly rounded. This design not only adds greatly to the strength of the shelf, but allows for the use of various accessory items such as wire book supports, hook-on book supports and clip-on label holders. Shelf ends are turned down 90 degrees to form a proper connection with the shelf brackets. The front face of the shelf shall be 13/16" thick and designed to carry a uniformly distributed load of 50 pounds per lineal foot without deflection in excess of 3/16". Adjustable shelves for standard 36" wide sections shall measure 35-7/16" clear between shelf brackets. Actual depth of shelf is 1" less than nominal.

***STEEL BACKS:*** Backs are 19-gauge steel with single 90-degree bends at both top and bottom, and two 90degree bends along each vertical edge to add rigidity. Backs fasten between the stack uprights with machine screws/retainer plate assembly.

***CENTERLINE HOOK-ON BOOKSTOP:*** The offset bookstop is designed to fit between the stack uprights so that the center line of the bookstop is on the same plane as the center line of the bookstack. This bookstop is used when increased filing depth is required and eliminates the need for bookstops on each face of bookstack. The 18-gauge bookstop is formed along the top and bottom edge with two 90-degree bends for rigidity. The offset ends have a notched hood formed and bent at 90 degrees to allow it to engage the upright slots. Overall size is 35-5/16" long and 2-3/4" high.

***HOOK-ON BOOKSTOP:*** The hook-on bookstop is designed to prevents books from being pushed back on the shelf. The 18 gauge steel stop is formed along the top and bottom edge with two 90 degree bends for rigidity. These bends are cut back at each end to allow the stop to fit securely between the stack uprights. The ends have a notched hook formed and bent at a 90-degree angle to allow it to engage the upright slots. Overall size is 35-5/16" long and 2-3/4" high.

***HOOK-ON TYPE BOOK SUPPORT:*** Support is two-piece welded together of 16-gauge steel channel shaped with 90-degree bends front and back forming 1/2" flanges and a 1-3/8" bottom flange at 90 degrees to vertical. Hook-on adapter is 16 gauge 2-1/4" wide x 5-1/4" long with 90-degree bends at back to hook around front of adjustable shelf. Support is furnished with neo-cork pad. Standard heights are 6" and 9".

***PLATE TYPE BOOK SUPPORT:*** Plate book supports are formed one-piece 16-gauge steel with a portion die cut and formed at 90 degrees. The vertical portion is further formed at both vertical edges with a flange 1/2" wide to prevent knifing of the books and loss of the support between the books. The support has a 5-15/16" wide x 4-5/8" deep base and is fitted with a neo-cork pad, 1/16" thick, on the bottom surface to prevent skidding and damage to the shelves. Standard

heights are 6" and 9".

### ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

***SLIDING WIRE BOOK SUPPORT ASSEMBLY:*** This two-part assembly consists of a backstop and a wire book support. The 18-gauge backstop is formed along the top and bottom edges with two 90-degree bends to create a "C"-shaped channel that accepts a wire book support. The ends have a notched hook formed and bent at a 90-degree angle for engaging the upright slots;. The overall dimensions of the back stop are 35-5/16" long and 2-3/4" high. The wire book support is formed of 7-gauge hard drawn M.D. basic spring wire with a bright nickel plated finish. The support extends approximately 6-1/2" from the face of the upright to the front of the support. The back ends of the support are bent at 90-degree angles to engage the channel of the backstop.

***WIRE BOOK SUPPORTS:*** Wire supports are 7-gauge hard draw M.B. basic spring wire with a bright nickel-plated finish. The support engages the channels on the underside of the book shelves and extend down into the book space of the shelf below to support the books. Supports are eight 6" or 9" high and of the proper depth to correspond with the shelf it is to be used on.

***BROWSER BIN:*** The browser bin consists of two 16-gauge support brackets notched at the rear edge with two hooks to engage the stack upright slots. The body of the bin is 18-gauge steel formed to create a front, bottom and sloping back. The top edges at the front and back are formed with three 90 degree bends. The back of the bin is formed at 15 degrees for a more comfortable viewing angle. Three tabs are formed and perforated at each end at the bottom and at the top at both front and rear to receive drive rivets used to attach the support brackets to the bin body. Three sliding divider plates, 18-gauge steel, are provided with each bin. The rear surface of each divider is laminated with cork to insure a smooth and quiet operation. The bottom of the bin receives a serrated rubber mat to deaden sound and to prevent displayed material from sliding. Overall dimensions are 35-1/4" long; 6-7/8" high; 11" deep from the face of the upright. Inside dimensions measure 8-1/4" deep at the bottom and 6" high.

***STEEL CANOPY TOPS--BOLT-IN STYLE:*** Canopy tops are 18-gauge steel formed front and rear with three 90-degree bends resulting in a reinforcing channel shape in cross section. The ends of the top are formed with 90-degree flanges to provide attachment to the support gussets. The tops are formed to provide a 13/16" high front and rear edge and are reversible for use on high stacks or on low stacks where a finished top surface is desirable. Tops are distinguished from adjustable shelves by a 1/4" diameter hole at each end of the bottom flange. Tops are designed to accept wire book supports. Canopy support gussets are 13-gauge steel and are bolted to each end and intermediate upright where canopy tops are installed. Support gussets are perforated to allow for a hex-head bolt-and-nut connection to the canopy top. This top assembly will not intermember with wall hung shelving. Double-Face Canopies can also be made in one piece as an option. Please specify

***CARD HOLDERS FOR 5" WIDE X 3" HIGH CARDS:*** Holders are cast aluminum and attach flush to end panels with screws. Satin aluminum finish only. (Labels and protectors not included.)

***CARD HOLDER FOR 4" HIGH X OPTION WIDTH:*** Holders are extruded aluminum with width as specified up to 24-1/2". Painted finish only. (Labels and protectors are not included.)

## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

***CASCADE NEWSPAPER DISPLAY:*** Available for 6 or 10 newspapers. The newspaper display unit consists of six parts: 1 pair of newspaper file brackets, 2 gussets, and 2 adjustable mounting spacers.

File brackets are 14-gauge steel and triangular shape, formed at the rear with a 1" flange. One and one-quarter inch (1-1/4") wide round end notches are provided at 4" intervals along the front edge to accept standard newspaper file sticks and to display the newspapers in a cascade fashion. Two gussets are provided at the bottom to prevent longitudinal movement. The gussets are 16-gauge steel, triangular in shape, formed on two sides with one 1-1/2" 90 degree bend and perforated to engage with the holes in the mounting spacers. Mounting spacers are 18-gauge steel, formed into a "C" shaped channel, 2-3/4" across the web with 1/2" top and bottom flanges and 1/4" return flanges. Holes 7/32" diameter are provided on 3" centers continuously through the center line of the web to allow adjustability of file stick brackets. Hooks are provided at each end to allow for engagement into slots in the stack uprights. Gussets, mounting spacers and brackets are assembled together with #10-24 pan head machine screws and hex nuts. Overall dimensions of 6 file display unit is 11" deep x 24-1/4" high; of 10 file display unit is 14-9/16" deep x 39-1/2" high (all dimensions are actual). Newspaper files, natural finished hardwood, 34-1/2" long, not included.

***COAT RACK:*** The coat rack consists of three parts: the coat rod and two supporting brackets. The coat rod is 16 gauge, 1" diameter tubing, 35" long. It is supported at each end by 16-gauge steel channels, perforated to accept the rod and for attachment to the stack uprights. Two mounting brackets complete with hardware are supplied.

***COMPACT DISC/AUDIO CASSETTE SHELVES:*** Shelves are one-piece 16-gauge steel, formed at the edge with three 90 degree bends, creating a hollow square in section. The rear edge is formed with one 90-degree bend. Shelf ends are perforated to permit attachment of shelf brackets with aluminum drive rivets, two per shelf end. Shelf brackets are 10-gauge steel projecting 1-5/16" above and 3-7/16" below the shelf. Brackets are perforated to receive drive rivet attachment to shelf. The rear edge of each bracket has three notched hooks to engage the slots in the stack uprights.

Mounted on the shelf are two wire racks, each mounted on rolling slides. Each rack is made of vinyl coated #8gauge wire. The racks are mounted on a steel pull-out slide mechanism with nylon rollers. There is an indent in the slide to insure the rack remains in a closed position when not in use. This indent also prevents accidental removal, however, the rack is easily removable and interchangeable with other racks./ The rack is single tier and will house 39 audio cassettes or 78 compact discs or a combination of both, spine up. Total shelf capacity is 78 audio cassettes or 156 compact disc. Assembled shelf projects 18" from stack uprights.

***CORNER FILLERS:*** Corner fillers, when required, are provided at junctions of single-faced stack ranges where they meet in the corner of a room. Corner fillers are three-piece construction consisting of two flat sheets of 19-gauge steel, slightly deeper than, and the same height as, the stack. A corner connection angle, 19 gauge, formed 90 degrees 1" x 1" x stack height is furnished to form closed corner filler at the intersection of the two flat panels. Fillers can be provided with a dust cap or HPL tops can be specified.



## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

***DIVIDER SHELVES:*** Shelves are one-piece 18-gauge steel with the front edge formed down with three 90-degree bends forming a hollow square in section. The back edge of the shelf is formed up 5" to receive slots for the placement of adjustable dividers. One row of slots is located at the bottom front of the shelf, and two rows of slots are in the shelf back. Slots for divider adjustment are placed 1" on center across the width of the shelf. Each shelf is supplied with a pair of 16-gauge shelf brackets. Shelf has an actual width of 35-7/16".

Dividers are 19-gauge steel, 6-1/2" high by depth of shelf. Divider has a formed hook at the bottom front and a hook and safety lug on the rear edge. Hooks and lugs engage in slots in the shelves and are adjustable every inch.

***STEEL END PANELS:*** Panels shall extend full width and height of unit and shall be one-piece construction formed flush with 1-3/4" thick square edge and exposed return flanges. Tops to be tightly closed with separate 16-gauge stiffening angles. Centers of double-faced panels to be furnished with full height channels for attaching to uprights, also to deaden sound and eliminate "oil canning".

***FILM REEL SHELVES:*** Film reel shelves have standard Library Bureau support brackets and are for use in standard 3' sections. Film reel rack has 11-gauge wire formed to receive reels with wire welded to front and rear support angles. Each reel rack shelf has a label holder attached to the front edge that is continuous and receives individual labels for each reel position. Individual labels are furnished.

Reel rack shelves are available in three sizes:

LRK 4-3: Rack is 5-5/8" deep x 3-7/8" high with 1" wire spacing. It is mounted on 10" deep brackets and will hold twenty-seven (27) 16 mm metal reel cans (400' reels).

LRK 16-3: Rack is 8" deep x 5-5/8" high with 1-1/8" wire spacing. It is mounted on 12" deep brackets and will hold twenty-six (26) 16 mm metal reel cans (400' reels).

LPC: As above on 12" brackets with 1-1/2" wire spacings for use with plastic reel case. Holds twenty-three (23) 400' reels.

***FIXED PERIODICAL SHELF:*** Shelves shall be sloping at approximately 55 degrees. Display shelf shall have a 7/8" lip at bottom and to be 12" deep x 12" H.

***FLAT STORAGE SHELF:*** Shelf shall be same as flat book shelf, 12" deep and mounted on inverted brackets for "continuous" placement in range. Fixed periodical display shelves and flat storage shelves alternate on stack upright. Shelves are ordered separately.

***FLAT NEWSPAPER SHELVES:*** Shelves are one-piece 16-gauge steel, formed at the front edge with three 90 degree bends, creating a hollow square in section. The rear edge is formed with one 90 degree bend. Shelf ends are perforated to permit attachment of shelf brackets with aluminum drive rivets, two per shelf end. Shelf brackets are 10-gauge steel projecting 1-5/16" above and 3-7/16" below the shelf. Brackets are perforated to receive drive rivet attachment to shelf. The rear edge of each bracket has three notched hooks to engage the slots in the stack uprights. Assembled flat newspaper shelf projects 18" from stack uprights.

## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

***FLIPPER DOOR UNIT:*** These units are designed to hang on the stack uprights on 13" vertical centers. Each assembly consists of two main components: the shell which consists of a top, back, bottom and two ends; and a door assembly consisting of the door and a cylinder lock with a key removal only in the locked position.

***HANGING BAG RACK:*** Rack consists of two adjustable inverted brackets of 13-gauge steel and two stainless steel rods 3/8" diameter by 35-7/16" long. The rods are tapped in each end to receive machine bolts passing through holes in the bracket and into the end of the rod. The rear edge of the bracket has three notched hooks to engage the perforated slots in the stack uprights.

***HINGED PERIODICAL DISPLAY AND STORAGE SHELVES:*** Display shelf shall have a 17 degree slope with a flat storage shelf underneath. Display shelves operate on 16-gauge pivot plates with plastic bearing attached to shelf brackets. Rubber bumpers are to be provided for each shelf. Shelves provide 12" high display (or 14" high when specified) with flat storage space (with optional dividers and backs when specified).

***HORIZONTAL NEWSPAPER DISPLAY:*** Rack consists of left and right hand bracket assemblies and hardware for attaching brackets to stack uprights using 1/4"-#20 round head machine screws which pass through the slots in the uprights into a 1/4"-#20 strap nut. The brackets extend 11" beyond the face of the upright. Each bracket is 16-gauge steel and is equipped to hold seven newspaper files horizontally between stack uprights. Newspaper files, natural finished hardwood, 34-1/2" long, not included.

***HPL/WOOD TOPS and END PANEL MOUNTINGS:*** Provide 13-gauge brackets engaged into web of uprights to attach continuous tops and End Panels.

***SHELF LABEL HOLDERS:*** Holders are clear plastic to clip on shelf front edge and receive labels 5/8" high x 5" long. (Labels included.)

***MICROFILM/CASSETTE SHELF:*** Shelves are a two-tier design, one-piece, 18-gauge steel. Each tier is 4" deep with an integral back 3" high. Each tier tilts down toward the back 5 degrees to prevent stored media from falling forward. Microfilm capacity is 42. Audio cassette capacity is 110. Supporting brackets are the same basic design as for book shelves with a 9-1/4" actual depth. The bracket is attached to the shelf with four machine screws and hex nuts or drive rivets.

***MULTI-PURPOSE DISPLAY SHELVES:*** shelves are one piece 18 gauge steel formed at the front and rear with three 90 degree bends. The shelf ends are turned down 90 degrees to form a proper connection with the shelf brackets. The front face of the shelf shall be 13/16" thick and designed to carry a uniformly distributed load of 50 pounds per linear foot without deflection in excess of 3/16". The multi-purpose display shelf in the flat or standard position will allow for a 8" actual shelf with a 5-1/8" integral back. When bolted into the sloping position with 1/4-20 nuts and bolts, the shelf will allow a 5-1/3" deep actual shelf with an 8" integral back to prevent material from falling off. Multi-purpose display shelves for standard 36" wide sections shall measure 35-7/16" clear between shelf brackets. Shelf is supplied with two 9" actual shelf brackets.

## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

***PAPERBACK/VIDEOCASSETTE SHELF:*** Shelf is designed for storage and/or display of various media types; i.e., paperback books, compact discs, VHS or Beta video cassettes, etc. The shelf is one-piece, 18-gauge steel with an actual depth of 6" and an actual width of 35-7/16". The front is formed in a box shape with three 90 degree bends with front face of shelf being 13/16" thick. The back of the shelf is formed with two 90 degree bends, one vertically 5" high with a return to the rear 3/8". The shelf's bed and back are slotted 1" on center to accept 6-1/2" high adjustable plate dividers. Six dividers are furnished with each shelf. The ends of the shelf are formed down 90 degrees to engage the interlocking lugs of the 16gauge support bracket. The bracket is designed to support the shelf and to tilt the shelf down toward the rear 8 degrees. This prevents the stored or displayed media from falling forward and also presents a more comfortable viewing angle.

***PENINSULAR FILLERS:*** Peninsular fillers are designed to form a closed juncture where wall ranges are joined to double-faced ranges at right angles. Fillers are constructed the same as the corner fillers except they are six-piece construction consisting of four flat sheets of 19-gauge steel and two 19-gauge 1" x 1" full height angles. Fillers can be provided with a dust cap or HPL tops can be specified.

***PLEXIGLAS COVER:*** Attached to a hinged periodical shelf, this cover is used to protect current issues of periodicals while leaving them completely visible. Constructed of 3/16" thick x 11" high x 33" long plexiglas it attaches to the top edge of the shelf with a piano hinge.

***RANGE FINDERS:*** Range finders are one-piece construction of 11-gauge aluminum formed "V" shaped to hold cards 5" wide x 3" high on each face of the "V". Satin finish aluminum only. (Labels and protectors included.)

***SHELF BRACKETS:*** Plate brackets for the ends of adjustable shelves are 16-gauge steel with a neatly angled front edge and out turned flanges. Brackets are 7-1/8" high and the full depth of the shelf. The brackets are securely fastened to the shelf by interlocking lugs formed at the bottom of each bracket designed to prevent accidental movement or removal. The rear edge of each bracket is formed with a notched hook and a rounded safety lug. Bracket hooks shall intermember with the slots on the uprights. The safety lug shall also intermember with the upright slots and be properly designed to prevent unintentional lifting of shelf assemblies and to prevent lateral movement of the shelves. The out-turned flange of the bracket prevents knifing of books and material when placing them on the shelves. Automatic spacing and alignment is achieved by safety spacers formed into the bracket in the upper front portion.

***SLIDING REFERENCE SHELVES:*** To be 18-gauge steel attached to underside of book shelves, extending same depth of shelf when fully extended. They shall operate on ball bearing extension slides attached to shelf brackets.

***STACK CARREL DESK:*** To be 35-7/8" wide x 24" deep high pressure laminate work surface and edges and suitable backer sheet. Desk top supported by inverted steel brackets with three hooks to engage steel uprights. (Furnish steel front legs with adjustable glides when specified.)

## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

***STORAGE LOCKER:*** Stack storage lockers are designed to hang on the stack uprights at 18" centers. Each locker is divided into two compartments, each with a lockable hinged door. The lockers consist of the following basic parts: two 16-gauge steel ends, each notched along the rear edge to form six hooks designed to engage the stack uprights; one shell formed to create a top, back, and bottom; one center divider assembly; and two hinged and lockable doors. The front, bottom edges of the 19-gauge top and bottom are formed into a channel shape. The partition assembly consists of two 16-gauge pieces. The main portion is channel-shaped at the front edge and formed with a 90-degree bend on the other three edges. The second part is a channel-shaped member spot welded top the main member along the front vertical edge. The 18-gauge steel doors are perforated with rectangular slots in the center portion to allow for ventilation and content viewing. Three edges are formed 90 degrees and the lock edge is formed in a channel shape. The doors are equipped with cylinder locks with the keys removable only in the locked position. Overall dimensions are 35-5/8" wide; 17-7/8" high; 11-3/16" deep from the face of the upright. The clear inside dimensions of each compartment are 16-1/2" W; 16-1/8" H; 10-7/16" D.

***STRUT CHANNEL (OPTIONAL):*** Under certain conditions required by non-freestanding bookstack, strut channels may be specified. Strut channels shall be formed "C" shaped of 16-gauge steel 2" wide with upturned legs 1-3/16" high and inward flanges 1/2" wide. Channels to be installed at right angles to stack ranges with necessary splices and wall anchors.

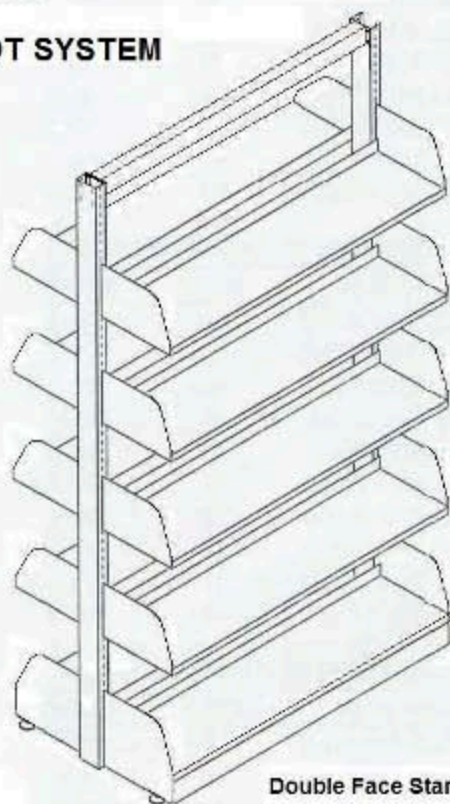
***DVD-VHS VIDEO CASSETTE SHELVES:*** Shelves are one-piece 16-gauge steel, formed at the edge with three 90 degree bends, creating a hollow square in section. The rear edge is formed with one 90 degree bend. Shelf ends are perforated to permit attachment of shelf brackets with aluminum drive rivets, two per shelf end. Shelf brackets are 10-gauge steel projecting 1-5/16" above and 3-7/16" below the shelf. Brackets are perforated to receive drive rivet attachment to shelf. The rear edge of each bracket has three notched hooks to engage the slots in the stack uprights. Mounted on the shelf are three wire racks, each mounted on rolling slides. Each rack is made of vinyl coated #8-gauge wire. The racks are mounted on a steel pull out slide mechanism with nylon rollers. There is an indent in the slide to insure the rack remains in a closed position when not in use. This indent also prevents accidental removal, however, the rack is easily removable and interchangeable with other racks. The rack is double-tiered and will house 40 video cassettes (20 each tier). Total shelf capacity is 120 video cassettes. Assembled shelf [projects 18" from stack uprights.

***WALL HUNG UPRIGHTS:*** Wall hung uprights are designed for attaching directly to a wall and will accept any Library Bureau shelf. Method and type of wall anchor will be determined by wall type. Uprights are "C"-shaped channels 2" across the face with returns of 1-3/16" and 1/2" return flanges. Faces are perforated with two rows of 1/4" x 5/8" rectangular slots to receive hooks and safety lugs on the shelf brackets. Every fifth and sixth slot are clearly marked for convenient shelf hanging and adjusting. On the center line of the face, holes are pierced every 16" for wall anchoring. Uprights are standard in 90", 66" and 42" heights. Other heights are available upon request.

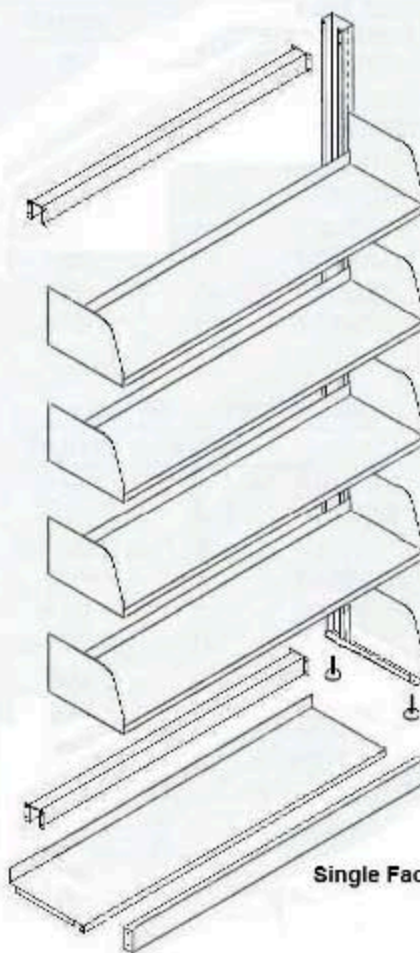
***ZIG-ZAG SHELF INSERT:*** This insert is used to convert a standard flat 36" shelf into a spine-out or face-out display unit. The one-piece insert is formed with 6 display areas; each with two 4" deep faces that display media at a 45 degree angle to the front of the shelf. The insert is attached to the shelf with either double-sided tape or with sheet metal screws. Overall dimensions of insert are 34-1/2" wide x 7" high.

# LBS T30-Base

SHARED SLOT SYSTEM



Double Face Starter



Single Face Adder



## LIBRARY BUREAU STEEL SPECIFICATIONS

### SafeStak – T30 Base For Seismic Zones 0, 1 and 2A

#### ***Bookstack General Specifications:***

***DESIGN:*** Bolted upright and cross member frame construction in a starter/adder configuration. Bracket type, shared slots, double faced or single faced with closed bases.

***SCOPE OF WORK:*** This specification covers all materials of library steel bracket type bookstack. Unit heights, depths and accessories to be as indicated on floor plans, specifications or schedule of equipment. Where required, double faced bookstack will be properly floor anchored and all wall or single faced shelving to be secured to walls in an inconspicuous manner. Anchors to be determined by field conditions in accordance with local codes. Specific anchors not included as part of this specification.

***MATERIALS AND WORKMANSHIP:*** Only the finest materials and quality workmanship will be acceptable. Sheet metal to be Class 1 cold or hot rolled and full pickled. Gauge (GA.) thicknesses are U. S. Standard with the following minimum requirements:

1. Shelves - 18 gauge
2. Column stiffener --- 16 gauge
3. Base bracket --- 13 gauge
4. Top spreader --- 16 gauge
5. Bottom spreader – 16 gauge
6. Adjustable shelf brackets --- 16 gauge
7. Upright columns --- 16 gauge

***CAPACITY REQUIREMENTS:*** Each shelf shall have a minimum clearance between brackets of 35-7/16" and support 50 pounds per linear foot minimum.

***FINISH:*** All parts except woods or laminates shall be automatically washed and phosphate coated. Following a complete drying process, each part is to receive a finish coat of electrostatically applied powder paint polymer. The final finish must meet or exceed minimum requirements as specified by Library Technology Reports. Wood or laminate parts require finish on exposed surfaces field assembled by wood screws in a staggered pattern using holes provided.

***COLOR:*** To be selected from manufacturer's 48 standard colors (unless otherwise specified).

***TYPE OF BOOKSTACK:*** Adjustable shelves hang on a upright columns utilizing shared slot system in a cantilever manner allowing a wide flexibility of sizes and accessory arrangement in any nominal three foot (36") wide section. (Sections 24" wide or 30" wide shall also be supplied as specified).

## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

Following are component parts required:

- a) ***UPRIGHT COLUMNS***: 16 gauge channel shape with no less than 1/2" stiffening flanges measuring 2" into the web and 1-3/16" at front and rear surfaces. Uprights are perforated with a series of 1/4" x 5/8" slots spaced 1" on vertical centers. Every fifth and sixth slot to be shaped differently for ease of shifting adjustable shelves.
- b) ***TOP and BOTTOM SPREADER***: 16 gauge "C" shaped channel with 1ea. 2" deep, 2ea. 1-1/4" and 2ea. 1/2" flanges and 8 bends with assembly bolt holes.
- c) ***COLUMN STIFFENER***: Shall be 13 GA. 2" wide and approximately 7-1/2" shorter than uprights on all stacks over 66" high, Web is bolted inside uprights when required with 3/8" nuts and bolts.
- d) ***BASE BRACKETS***: Shall be designed to fit center of uprights. Material shall no less than 13 GA. Brackets to have a 90 degree flange at bottom to rest on floor with outer ends punched to receive leveling glides, when specified. Top and front edge of base brackets angled to match adjustable shelf brackets and to allow nesting adjustable shelves into base shelf area when desired.
- e) ***CLOSED BASE SHELVES***: Shall be formed to meet industry performance standards of 50 pounds per foot without deflection in excess of 3/16". One piece construction designed to fit snugly around upright columns and base brackets without need of hardware fasteners. Front height shall be at least 3' and sides shall have stiffening flanges, designed to inter-member with base bracket slots. The shelf is 3/4" smaller to allow for the wood or laminate fascia supplied and field installed by authorized LBS dealer.
- f) ***HARDWARE***: Shall be rust proof, cadmium or zinc plated or equal and shall be completely concealed from view in finished assembly with no projections to harm material or users.
- g) ***SHELVES AND ACCESSORIES***: All flat, Tu-bar, divider and accessories may be used in any combination.

***ADJUSTABLE FLAT TU-BAR SHELVES***: Shall be same construction as regular adjustable shelves with added reinforced slot to receive Loc-Tite book supports. Loc-Tite book support to be 16 gauge 3-5/16" W x 1-7/8" D, (6" or 9" high as specified). Loc-Tite supports shall operate in similar fashion to a follower block providing maximum support for filed materials and designed to prevent unintentional release. These supports shall have 3/8" deep return flange to prevent knifing books and shall operate either above or below the shelf. Loc-Tite book supports not included with shelf, specify as required.

## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

***ADJUSTABLE SHELVES:*** Shelves are one-piece, 18-gauge steel formed at both front and rear with three 90 degree bends. Each bend is slightly rounded. This design not only adds greatly to the strength of the shelf, but allows for the use of various accessory items such as wire book supports, hook-on book supports and clip-on label holders. Shelf ends are turned down 90 degrees to form a proper connection with the shelf brackets. The front face of the shelf shall be 13/16" thick and designed to carry a uniformly distributed load of 50 pounds per lineal foot without deflection in excess of 3/16". Adjustable shelves for standard 36" wide sections shall measure 35-7/16" clear between shelf brackets. Actual depth of shelf is 1" less than nominal.

***STEEL BACKS:*** Backs are 19-gauge steel with single 90-degree bends at both top and bottom, and two 90-degree bends along each vertical edge to add rigidity. Backs fasten between the stack uprights with machine screws/retainer plate assembly.

***CENTERLINE HOOK-ON BOOKSTOP:*** The offset bookstop is designed to fit between the stack uprights so that the center line of the bookstop is on the same plane as the center line of the bookstack. This bookstop is used when increased filing depth is required and eliminates the need for bookstops on each face of bookstack. The 18-gauge bookstop is formed along the top and bottom edge with two 90-degree bends for rigidity. The offset ends have a notched hood formed and bent at 90 degrees to allow it to engage the upright slots. Overall size is 35-5/16" long and 2-3/4" high.

***HOOK-ON BOOKSTOP:*** The hook-on bookstop is designed to prevent books from being pushed back on the shelf. The 18 gauge steel stop is formed along the top and bottom edge with two 90 degree bends for rigidity. These bends are cut back at each end to allow the stop to fit securely between the stack uprights. The ends have a notched hook formed and bent at a 90-degree angle to allow it to engage the upright slots. Overall size is 35-5/16" long and 2-3/4" high.

***HOOK-ON TYPE BOOK SUPPORT:*** Support is two-piece welded together of 16-gauge steel channel shaped with 90-degree bends front and back forming 1/2" flanges and a 1-3/8" bottom flange at 90 degrees to vertical. Hook-on adapter is 16 gauge 2-1/4" wide x 5-1/4" long with 90-degree bends at back to hook around front of adjustable shelf. Support is furnished with neo-cork pad. Standard heights are 6" and 9".

***PLATE TYPE BOOK SUPPORT:*** Plate book supports are formed one-piece 16-gauge steel with a portion die cut and formed at 90 degrees. The vertical portion is further formed at both vertical edges with a flange 1/2" wide to prevent knifing of the books and loss of the support between the books. The support has a 5-15/16" wide x 4-5/8" deep base and is fitted with a neo-cork pad, 1/16" thick, on the bottom surface to prevent skidding and damage to the shelves. Standard heights are 6" and 9".



## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

***SLIDING WIRE BOOK SUPPORT ASSEMBLY:*** This two-part assembly consists of a backstop and a wire book support. The 18-gauge backstop is formed along the top and bottom edges with two 90-degree bends to create a "C"-shaped channel that accepts a wire book support. The ends have a notched hook formed and bent at a 90-degree angle for engaging the upright slots;. The overall dimensions of the back stop are 35-5/16" long and 2-3/4" high. The wire book support is formed of 7-gauge hard drawn M.D. basic spring wire with a bright nickel plated finish. The support extends approximately 6-1/2" from the face of the upright to the front of the support. The back ends of the support are bent at 90-degree angles to engage the channel of the backstop.

***WIRE BOOK SUPPORTS:*** Wire supports are 7-gauge hard draw M.B. basic spring wire with a bright nickel-plated finish. The support engages the channels on the underside of the book shelves and extend down into the book space of the shelf below to support the books. Supports are eight 6" or 9" high and of the proper depth to correspond with the shelf it is to be used on.

***BROWSER BIN:*** The browser bin consists of two 16-gauge support brackets notched at the rear edge with two hooks to engage the stack upright slots. The body of the bin is 18-gauge steel formed to create a front, bottom and sloping back. The top edges at the front and back are formed with three 90 degree bends. The back of the bin is formed at 15 degrees for a more comfortable viewing angle. Three tabs are formed and perforated at each end at the bottom and at the top at both front and rear to receive drive rivets used to attach the support brackets to the bin body. Three sliding divider plates, 18-gauge steel, are provided with each bin. The rear surface of each divider is laminated with cork to insure a smooth and quiet operation. The bottom of the bin receives a serrated rubber mat to deaden sound and to prevent displayed material from sliding. Overall dimensions are 35-1/4" long; 6-7/8" high; 11" deep from the face of the upright. Inside dimensions measure 8-1/4" deep at the bottom and 6" high.

***STEEL CANOPY TOPS--BOLT-IN STYLE:*** Canopy tops are 18-gauge steel formed front and rear with three 90-degree bends resulting in a reinforcing channel shape in cross section. The ends of the top are formed with 90-degree flanges to provide attachment to the support gussets. The tops are formed to provide a 13/16" high front and rear edge and are reversible for use on high stacks or on low stacks where a finished top surface is desirable. Tops are distinguished from adjustable shelves by a 1/4" diameter hole at each end of the bottom flange. Tops are designed to accept wire book supports. Canopy support gussets are 13-gauge steel and are bolted to each end and intermediate upright where canopy tops are installed. Support gussets are perforated to allow for a hex-head bolt-and-nut connection to the canopy top. This top assembly will not intermember with wall hung shelving.

***CARD HOLDERS FOR 5" WIDE X 3" HIGH CARDS:*** Holders are cast aluminum and attach flush to end panels with screws. Satin aluminum finish only. (Labels and protectors not included.)

***CARD HOLDER FOR 4" HIGH X OPTION WIDTH:*** Holders are extruded aluminum with width as specified up to 24-1/2". Satin aluminum finish only. (Labels and protectors are not included.)

## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

***CASCADE NEWSPAPER DISPLAY:*** Available for 6 or 10 newspapers. The newspaper display unit consists of six parts: 1 pair of newspaper file brackets, 2 gussets, and 2 adjustable mounting spacers.

File brackets are 14-gauge steel and triangular shape, formed at the rear with a 1" flange. One and one-quarter inch (1-1/4") wide round end notches are provided at 4" intervals along the front edge to accept standard newspaper file sticks and to display the newspapers in a cascade fashion. Two gussets are provided at the bottom to prevent longitudinal movement. The gussets are 16-gauge steel, triangular in shape, formed on two sides with one 1-1/2" 90 degree bend and perforated to engage with the holes in the mounting spacers. Mounting spacers are 18-gauge steel, formed into a "C" shaped channel, 2-3/4" across the web with 1/2" top and bottom flanges and 1/4" return flanges. Holes 7/32" diameter are provided on 3" centers continuously through the center line of the web to allow adjustability of file stick brackets. Hooks are provided at each end to allow for engagement into slots in the stack uprights. Gussets, mounting spacers and brackets are assembled together with #10-24 pan head machine screws and hex nuts. Overall dimensions of 6 file display unit is 11" deep x 24-1/4" high; of 10 file display unit is 14-9/16" deep x 39-1/2" high (all dimensions are actual). Newspaper files, natural finished hardwood, 34-1/2" long, not included.

***COAT RACK:*** The coat rack consists of three parts: the coat rod and two supporting brackets. The coat rod is 16 gauge, 1" diameter tubing, 35" long. It is supported at each end by 16-gauge steel channels, perforated to accept the rod and for attachment to the stack uprights. Two mounting brackets complete with hardware are supplied.

***COMPACT DISC/AUDIO CASSETTE SHELVES:*** Shelves are one-piece 16-gauge steel, formed at the edge with three 90 degree bends, creating a hollow square in section. The rear edge is formed with one 90-degree bend. Shelf ends are perforated to permit attachment of shelf brackets with aluminum drive rivets, two per shelf end. Shelf brackets are 10-gauge steel projecting 1-5/16" above and 3-7/16" below the shelf. Brackets are perforated to receive drive rivet attachment to shelf. The rear edge of each bracket has three notched hooks to engage the slots in the stack uprights.

Mounted on the shelf are two wire racks, each mounted on rolling slides. Each rack is made of vinyl coated #8gauge wire. The racks are mounted on a steel pull-out slide mechanism with nylon rollers. There is an indent in the slide to insure the rack remains in a closed position when not in use. This indent also prevents accidental removal, however, the rack is easily removable and interchangeable with other racks./ The rack is single tier and will house 39 audio cassettes or 78 compact discs or a combination of both, spine up. Total shelf capacity is 78 audio cassettes or 156 compact disc. Assembled shelf projects 18" from stack uprights.

***CORNER FILLERS:*** Corner fillers, when required, are provided at junctions of single-faced stack ranges where they meet in the corner of a room. Corner fillers are three-piece construction consisting of two flat sheets of 19-gauge steel, slightly deeper than, and the same height as, the stack. A corner connection angle, 19 gauge, formed 90 degrees 1" x 1" x stack height is furnished to form closed corner filler at the intersection of the two flat panels. Fillers can be provided with a dust cap or HPL tops can be specified.

## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

***DIVIDER SHELVES:*** Shelves are one-piece 18-gauge steel with the front edge formed down with three 90-degree bends forming a hollow square in section. The back edge of the shelf is formed up 5" to receive slots for the placement of adjustable dividers. One row of slots is located at the bottom front of the shelf, and two rows of slots are in the shelf back. Slots for divider adjustment are placed 1" on center across the width of the shelf. Each shelf is supplied with a pair of 16-gauge shelf brackets. Shelf has an actual width of 35-7/16".

Dividers are 19-gauge steel, 6-1/2" high by depth of shelf. Divider has a formed hook at the bottom front and a hook and safety lug on the rear edge. Hooks and lugs engage in slots in the shelves and are adjustable every inch.

***STEEL END PANELS:*** Panels shall extend full width and height of unit and shall be one-piece construction formed flush with 1-3/4" thick square edge and exposed return flanges. Tops to be tightly closed with separate 16-gauge stiffening angles. Centers of double-faced panels to be furnished with full height channels for attaching to uprights, also to deaden sound and eliminate "oil canning".

***FILM REEL SHELVES:*** Film reel shelves have standard Library Bureau support brackets and are for use in standard 3' sections. Film reel rack has 11-gauge wire formed to receive reels with wire welded to front and rear support angles. Each reel rack shelf has a label holder attached to the front edge that is continuous and receives individual labels for each reel position. Individual labels are furnished.

Reel rack shelves are available in three sizes:

LRK 4-3: Rack is 5-5/8" deep x 3-7/8" high with 1" wire spacing. It is mounted on 10" deep brackets and will hold twenty-seven (27) 16 mm metal reel cans (400' reels).

LRK 16-3: Rack is 8" deep x 5-5/8" high with 1-1/8" wire spacing. It is mounted on 12" deep brackets and will hold twenty-six (26) 16 mm metal reel cans (400' reels).

LPC: As above on 12" brackets with 1-1/2" wire spacings for use with plastic reel case. Holds twenty-three (23) 400' reels.

***FIXED PERIODICAL SHELF:*** Shelves shall be sloping at approximately 55 degrees. Display shelf shall have a 7/8" lip at bottom and to be 12" deep x 12" H.

***FLAT STORAGE SHELF:*** Shelf shall be same as flat book shelf, 12" deep and mounted on inverted brackets for "continuous" placement in range. Fixed periodical display shelves and flat storage shelves alternate on stack upright. Shelves are ordered separately.

***FLAT NEWSPAPER SHELVES:*** Shelves are one-piece 16-gauge steel, formed at the front edge with three 90 degree bends, creating a hollow square in section. The rear edge is formed with one 90 degree bend. Shelf ends are perforated to permit attachment of shelf brackets with aluminum drive rivets, two per shelf end. Shelf brackets are 10-gauge steel projecting 1-5/16" above and 3-7/16" below the shelf. Brackets are perforated to receive drive rivet attachment to shelf. The rear edge of each bracket has three notched hooks to engage the slots in the stack uprights. Assembled flat newspaper shelf projects 18" from stack uprights.

## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

***FLIPPER DOOR UNIT:*** These units are designed to hang on the stack uprights on 13" vertical centers. Each assembly consists of two main components: the shell which consists of a top, back, bottom and two ends; and a door assembly consisting of the door and a cylinder lock with a key removal only in the locked position.

***HANGING BAG RACK:*** Rack consists of two adjustable inverted brackets of 13-gauge steel and two stainless steel rods 3/8" diameter by 35-7/16" long. The rods are tapped in each end to receive machine bolts passing through holes in the bracket and into the end of the rod. The rear edge of the bracket has three notched hooks to engage the perforated slots in the stack uprights.

***HINGED PERIODICAL DISPLAY AND STORAGE SHELVES:*** Display shelf shall have a 17 degree slope with a flat storage shelf underneath. Display shelves operate on 16-gauge pivot plates with plastic bearing attached to shelf brackets. Rubber bumpers are to be provided for each shelf. Shelves provide 12" high display (or 14" high when specified) with flat storage space (with optional dividers and backs when specified).

***HORIZONTAL NEWSPAPER DISPLAY:*** Rack consists of left and right hand bracket assemblies and hardware for attaching brackets to stack uprights using 1/4"-#20 round head machine screws which pass through the slots in the uprights into a 1/4"-#20 strap nut. The brackets extend 11" beyond the face of the upright. Each bracket is 16-gauge steel and is equipped to hold seven newspaper files horizontally between stack uprights. Newspaper files, natural finished hardwood, 34-1/2" long, not included.

***HPL TOPS:*** Provide continuous tops 1-1/4" thick or as specified with 1/16" high pressure laminate as selected over suitable solid cores. Provide approved balancing backer sheet. Support with 13-gauge brackets engaged into web of uprights.

***SHELF LABEL HOLDERS:*** Holders are clear plastic to clip on shelf front edge and receive labels 5/8" high x 5" long. (Labels included.)

***MICROFILM/CASSETTE SHELF:*** Shelves are a two-tier design, one-piece, 18-gauge steel. Each tier is 4" deep with an integral back 3" high. Each tier tilts down toward the back 5 degrees to prevent stored media from falling forward. Microfilm capacity is 42. Audio cassette capacity is 110. Supporting brackets are the same basic design as for book shelves with a 9-1/4" actual depth. The bracket is attached to the shelf with four machine screws and hex nuts or drive rivets.

***MULTI-PURPOSE DISPLAY SHELVES:*** shelves are one piece 18 gauge steel formed at the front and rear with three 90 degree bends. The shelf ends are turned down 90 degrees to form a proper connection with the shelf brackets. The front face of the shelf shall be 13/16" thick and designed to carry a uniformly distributed load of 50 pounds per linear foot without deflection in excess of 3/16". The multi-purpose display shelf in the flat or standard position will allow for a 8" actual shelf with a 5-1/8" integral back. When bolted into the sloping position with 1/4-20 nuts and bolts, the shelf will allow a 5-1/3" deep actual shelf with an 8" integral back to prevent material from falling off. Multi-purpose display shelves for standard 36" wide sections shall measure 35-7/16" clear between shelf brackets. Shelf is supplied with two 9" actual shelf brackets.

## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

***PAPERBACK/VIDEOCASSETTE SHELF:*** Shelf is designed for storage and/or display of various media types; i.e., paperback books, compact discs, VHS or Beta video cassettes, etc. The shelf is one-piece, 18-gauge steel with an actual depth of 6" and an actual width of 35-7/16". The front is formed in a box shape with three 90 degree bends with front face of shelf being 13/16" thick. The back of the shelf is formed with two 90 degree bends, one vertically 5" high with a return to the rear 3/8". The shelf's bed and back are slotted 1" on center to accept 6-1/2" high adjustable plate dividers. Six dividers are furnished with each shelf. The ends of the shelf are formed down 90 degrees to engage the interlocking lugs of the 16gauge support bracket. The bracket is designed to support the shelf and to tilt the shelf down toward the rear 8 degrees. This prevents the stored or displayed media from falling forward and also presents a more comfortable viewing angle.

***PENINSULAR FILLERS:*** Peninsular fillers are designed to form a closed juncture where wall ranges are joined to double-faced ranges at right angles. Fillers are constructed the same as the corner fillers except they are six-piece construction consisting of four flat sheets of 19-gauge steel and two 19-gauge 1" x 1" full height angles. Fillers can be provided with a dust cap or HPL tops can be specified.

***PLEXIGLAS COVER:*** Attached to a hinged periodical shelf, this cover is used to protect current issues of periodicals while leaving them completely visible. Constructed of 3/16" thick x 11" high x 33" long plexiglas it attaches to the top edge of the shelf with a piano hinge.

***RANGE FINDERS:*** Range finders are one-piece construction of 11-gauge aluminum formed "V" shaped to hold cards 5" wide x 3" high on each face of the "V". Satin finish aluminum only. (Labels and protectors included.)

***SHELF BRACKETS:*** Plate brackets for the ends of adjustable shelves are 16-gauge steel with a neatly angled front edge and out turned flanges. Brackets are 7-1/8" high and the full depth of the shelf. The brackets are securely fastened to the shelf by interlocking lugs formed at the bottom of each bracket designed to prevent accidental movement or removal. The rear edge of each bracket is formed with a notched hook and a rounded safety lug. Bracket hooks shall intermember with the slots on the uprights. The safety lug shall also intermember with the upright slots and be properly designed to prevent unintentional lifting of shelf assemblies and to prevent lateral movement of the shelves. The out-turned flange of the bracket prevents knifing of books and material when placing them on the shelves. Automatic spacing and alignment is achieved by safety spacers formed into the bracket in the upper front portion.

***SLIDING REFERENCE SHELVES:*** To be 18-gauge steel attached to underside of book shelves, extending same depth of shelf when fully extended. They shall operate on ball bearing extension slides attached to shelf brackets.

***STACK CARREL DESK:*** To be 35-7/8" wide x 24" deep high pressure laminate work surface and edges and suitable backer sheet. Desk top supported by inverted steel brackets with three hooks to engage steel uprights. (Furnish steel front legs with adjustable glides when specified.)

## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

***STORAGE LOCKER:*** Stack storage lockers are designed to hang on the stack uprights at 18" centers. Each locker is divided into two compartments, each with a lockable hinged door. The lockers consist of the following basic parts: two 16-gauge steel ends, each notched along the rear edge to form six hooks designed to engage the stack uprights; one shell formed to create a top, back, and bottom; one center divider assembly; and two hinged and lockable doors. The front, bottom edges of the 19-gauge top and bottom are formed into a channel shape. The partition assembly consists of two 16-gauge pieces. The main portion is channel-shaped at the front edge and formed with a 90-degree bend on the other three edges. The second part is a channel-shaped member spot welded top the main member along the front vertical edge. The 18-gauge steel doors are perforated with rectangular slots in the center portion to allow for ventilation and content viewing. Three edges are formed 90 degrees and the lock edge is formed in a channel shape. The doors are equipped with cylinder locks with the keys removable only in the locked position. Overall dimensions are 35-5/8" wide; 17-7/8" high; 11-3/16" deep from the face of the upright. The clear inside dimensions of each compartment are 16-1/2" W; 16-1/8" H; 10-7/16" D.

***STRUT CHANNEL (OPTIONAL):*** Under certain conditions required by non-freestanding bookstack, strut channels may be specified. Strut channels shall be formed "C" shaped of 16-gauge steel 2" wide with upturned legs 1-3/16" high and inward flanges 1/2" wide. Channels to be installed at right angles to stack ranges with necessary splices and wall anchors.

***DVD-VHS VIDEO CASSETTE SHELVES:*** Shelves are one-piece 16-gauge steel, formed at the edge with three 90 degree bends, creating a hollow square in section. The rear edge is formed with one 90 degree bend. Shelf ends are perforated to permit attachment of shelf brackets with aluminum drive rivets, two per shelf end. Shelf brackets are 10-gauge steel projecting 1-5/16" above and 3-7/16" below the shelf. Brackets are perforated to receive drive rivet attachment to shelf. The rear edge of each bracket has three notched hooks to engage the slots in the stack uprights. Mounted on the shelf are three wire racks, each mounted on rolling slides. Each rack is made of vinyl coated #8-gauge wire. The racks are mounted on a steel pull out slide mechanism with nylon rollers. There is an indent in the slide to insure the rack remains in a closed position when not in use. This indent also prevents accidental removal, however, the rack is easily removable and interchangeable with other racks. The rack is double-tiered and will house 40 video cassettes (20 each tier). Total shelf capacity is 120 video cassettes. Assembled shelf [projects 18" from stack uprights.

***WALL HUNG UPRIGHTS:*** Wall hung uprights are designed for attaching directly to a wall and will accept any Library Bureau shelf. Method and type of wall anchor will be determined by wall type. Uprights are "C"-shaped channels 2" across the face with returns of 1-3/16" and 1/2" return flanges. Faces are perforated with two rows of 1/4" x 5/8" rectangular slots to receive hooks and safety lugs on the shelf brackets. Every fifth and sixth slot are clearly marked for convenient shelf hanging and adjusting. On the center line of the face, holes are pierced every 16" for wall anchoring. Uprights are standard in 90", 66" and 42" heights. Other heights are available upon request.

***ZIG-ZAG SHELF INSERT:*** This insert is used to convert a standard flat 36" shelf into a spine-out or face-out display unit. The one-piece insert is formed with 6 display areas; each with two 4" deep faces that display media at a 45 degree angle to the front of the shelf. The insert is attached to the shelf with either double-sided tape or with sheet metal screws. Overall dimensions of insert are 34-1/2" wide x 7" high.

# LIBRARY BUREAU STEEL SPECIFICATIONS

## SafeStak

For Seismic Zones 0, 1 and 2A

### ***Bookstack General Specifications:***

***DESIGN:*** Welded frame starter/adder construction. Bracket type, double faced or single faced with closed bases.

***SCOPE OF WORK:*** This specification covers all materials of library steel bracket type bookstack. Unit heights, depths and accessories to be as indicated on floor plans, specifications or schedule of equipment. Where required, double faced bookstack will be properly floor anchored and all wall or single faced shelving to be secured to walls in an inconspicuous manner. Anchors to be determined by field conditions in accordance with local codes. Specific anchors not included as part of this specification.

***MATERIALS AND WORKMANSHIP:*** Only the finest materials and quality workmanship will be acceptable. Sheet metal to be Class 1 cold or hot rolled and full pickled. Gauge (GA.) thicknesses are U. S. Standard with the following minimum requirements:

1. Shelves - 18 gauge - all steel or all wood/laminate or steel w/fascia
2. Web stiffener --- 13 gauge
3. Base bracket --- 13 gauge
4. Top spreader --- 16 gauge
5. Bottom spreader – 16 gauge
6. Adjustable shelf brackets --- 16 gauge
7. Upright columns --- 16 gauge

***CAPACITY REQUIREMENTS:*** Each shelf shall have a minimum clearance between brackets of 35-7/16" and support 50 pounds per linear foot minimum.

***FINISH:*** All parts except woods or laminates shall be automatically washed and phosphate coated. Following a complete drying process, each part is to receive a finish coat of electrostatically applied powder paint polymer. The final finish must meet or exceed minimum requirements as specified by Library Technology Reports. Wood or laminate parts require finish on exposed surfaces field assembled by wood screws in a staggered pattern using holes provided.

***COLOR:*** To be selected from manufacturer's 48 standard colors (unless otherwise specified).

***TYPE OF BOOKSTACK:*** Adjustable shelves hang on a central upright column in a cantilever manner allowing a wide flexibility of sizes and accessory arrangement in any standard three foot (36") wide section. (Sections 24" wide or 30" wide shall also be supplied as specified).

Following are component parts required:

- a) ***WELDED FRAME:*** Welded frame consists of two upright columns and one each top and bottom spreader. Each spreader is welded between upright columns with 1-1/4" of weld on each face for a total of 10" of weld for the entire weld frame. Components are described in following items b, c, & d.

## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

b) ***UPRIGHT COLUMNS***: 16 gauge channel shape with no less than 1/2" stiffening flanges measuring 2" into the web and 1-3/16" at front and rear surfaces. Uprights are perforated with a series of 1/4" x 5/8" slots spaced 1" on vertical centers. Every fifth and sixth slot to be shaped differently for ease of shifting adjustable shelves.

c) ***TOP SPREADER***: 16 gauge "C" shaped channel with 1ea. 2" deep, 2ea. 1-1/4" and 2ea. 1/2" flanges and 4 bends.

d) ***BOTTOM SPREADER***: 16 gauge "C" shaped channel with 1ea. 2" deep, 2ea. 1-1/4" and 2ea. 1/2" flanges and 4 bends. Bottom Channel can be punched to receive leveling devices where 6 point leveling is required.

e) ***WEB STIFFENERS***: Shall be 13 GA. 2-1/4" wide and approximately 7-1/2" shorter than uprights on all stacks over 66" high, keyed to engage base brackets to form a continuous structural member from floor to top of stack. Web is bolted between welded frames with 3/8" nuts and bolts.

f) ***BASE BRACKETS***: Shall be designed to fit between uprights. Material shall no less than 13 GA. Brackets to have a 90 degree flange at bottom to rest on floor with outer ends punched to receive leveling glides, when specified. Top and front edge of base brackets angled to match adjustable shelf brackets and to allow nesting adjustable shelves into base shelf area when desired.

g) ***CLOSED BASE SHELVES***: Shall be formed to meet industry performance standards of 50 pounds per foot without deflection in excess of 3/16". One piece construction designed to fit snugly around upright columns and base brackets without need of hardware fasteners. Front height shall be at least 3' and sides shall have stiffening flanges, designed to inter-member with base bracket slots. The shelf is 3/4" smaller to allow for the wood or laminate fascia supplied and field installed by authorized LBS dealer.

h) ***HARDWARE***: Shall be rust proof, cadmium or zinc plated or equal and shall be completely concealed from view in finished assembly with no projections to harm material or users.

i) ***SHELVES AND ACCESSORIES***: All flat, Tu-bar, divider and accessories may be used in any combination.

***ADJUSTABLE FLAT TU-BAR SHELVES***: Shall be same construction as regular adjustable shelves with added reinforced slot to receive Loc-Tite book supports. Loc-Tite book support to be 16 gauge 3-5/16" W x 1-7/8" D, (6" or 9" high as specified). Loc-Tite supports shall operate in similar fashion to a follower block providing maximum support for filed materials and designed to prevent unintentional release. These supports shall have 3/8" deep return flange to prevent knifing books and shall operate either above or below the shelf. Loc-Tite book supports not included with shelf, specify as required.



## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

***ADJUSTABLE SHELVES:*** Shelves are one-piece, 18-gauge steel formed at both front and rear with three 90 degree bends. Each bend is slightly rounded. This design not only adds greatly to the strength of the shelf, but allows for the use of various accessory items such as wire book supports, hook-on book supports and clip-on label holders. Shelf ends are turned down 90 degrees to form a proper connection with the shelf brackets. The front face of the shelf shall be 13/16" thick and designed to carry a uniformly distributed load of 50 pounds per lineal foot without deflection in excess of 3/16". Adjustable shelves for standard 36" wide sections shall measure 35-7/16" clear between shelf brackets. Actual depth of shelf is 1" less than nominal.

***STEEL BACKS:*** Backs are 19-gauge steel with single 90-degree bends at both top and bottom, and two 90-degree bends along each vertical edge to add rigidity. Backs fasten between the stack uprights with machine screws/retainer plate assembly.

***CENTERLINE HOOK-ON BOOKSTOP:*** The offset bookstop is designed to fit between the stack uprights so that the center line of the bookstop is on the same plane as the center line of the bookstack. This bookstop is used when increased filing depth is required and eliminates the need for bookstops on each face of bookstack. The 18-gauge bookstop is formed along the top and bottom edge with two 90-degree bends for rigidity. The offset ends have a notched hood formed and bent at 90 degrees to allow it to engage the upright slots. Overall size is 35-5/16" long and 2-3/4" high.

***HOOK-ON BOOKSTOP:*** The hook-on bookstop is designed to prevent books from being pushed back on the shelf. The 18 gauge steel stop is formed along the top and bottom edge with two 90 degree bends for rigidity. These bends are cut back at each end to allow the stop to fit securely between the stack uprights. The ends have a notched hook formed and bent at a 90-degree angle to allow it to engage the upright slots. Overall size is 35-5/16" long and 2-3/4" high.

***HOOK-ON TYPE BOOK SUPPORT:*** Support is two-piece welded together of 16-gauge steel channel shaped with 90-degree bends front and back forming 1/2" flanges and a 1-3/8" bottom flange at 90 degrees to vertical. Hook-on adapter is 16 gauge 2-1/4" wide x 5-1/4" long with 90-degree bends at back to hook around front of adjustable shelf. Support is furnished with neo-cork pad. Standard heights are 6" and 9".

***PLATE TYPE BOOK SUPPORT:*** Plate book supports are formed one-piece 16-gauge steel with a portion die cut and formed at 90 degrees. The vertical portion is further formed at both vertical edges with a flange 1/2" wide to prevent knifing of the books and loss of the support between the books. The support has a 5-15/16" wide x 4-5/8" deep base and is fitted with a neo-cork pad, 1/16" thick, on the bottom surface to prevent skidding and damage to the shelves. Standard heights are 6" and 9".

## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

***SLIDING WIRE BOOK SUPPORT ASSEMBLY:*** This two-part assembly consists of a backstop and a wire book support. The 18-gauge backstop is formed along the top and bottom edges with two 90-degree bends to create a "C"-shaped channel that accepts a wire book support. The ends have a notched hook formed and bent at a 90-degree angle for engaging the upright slots;. The overall dimensions of the back stop are 35-5/16" long and 2-3/4" high. The wire book support is formed of 7-gauge hard drawn M.D. basic spring wire with a bright nickel plated finish. The support extends approximately 6-1/2" from the face of the upright to the front of the support. The back ends of the support are bent at 90-degree angles to engage the channel of the backstop.

***WIRE BOOK SUPPORTS:*** Wire supports are 7-gauge hard draw M.B. basic spring wire with a bright nickel-plated finish. The support engages the channels on the underside of the book shelves and extend down into the book space of the shelf below to support the books. Supports are eight 6" or 9" high and of the proper depth to correspond with the shelf it is to be used on.

***BROWSER BIN:*** The browser bin consists of two 16-gauge support brackets notched at the rear edge with two hooks to engage the stack upright slots. The body of the bin is 18-gauge steel formed to create a front, bottom and sloping back. The top edges at the front and back are formed with three 90 degree bends. The back of the bin is formed at 15 degrees for a more comfortable viewing angle. Three tabs are formed and perforated at each end at the bottom and at the top at both front and rear to receive drive rivets used to attach the support brackets to the bin body. Three sliding divider plates, 18-gauge steel, are provided with each bin. The rear surface of each divider is laminated with cork to insure a smooth and quiet operation. The bottom of the bin receives a serrated rubber mat to deaden sound and to prevent displayed material from sliding. Overall dimensions are 35-1/4" long; 6-7/8" high; 11" deep from the face of the upright. Inside dimensions measure 8-1/4" deep at the bottom and 6" high.

***STEEL CANOPY TOPS--BOLT-IN STYLE:*** Canopy tops are 18-gauge steel formed front and rear with three 90-degree bends resulting in a reinforcing channel shape in cross section. The ends of the top are formed with 90-degree flanges to provide attachment to the support gussets. The tops are formed to provide a 13/16" high front and rear edge and are reversible for use on high stacks or on low stacks where a finished top surface is desirable. Tops are distinguished from adjustable shelves by a 1/4" diameter hole at each end of the bottom flange. Tops are designed to accept wire book supports. Canopy support gussets are 13-gauge steel and are bolted to each end and intermediate upright where canopy tops are installed. Support gussets are perforated to allow for a hex-head bolt-and-nut connection to the canopy top. This top assembly will not intermember with wall hung shelving.

***CARD HOLDERS FOR 5" WIDE X 3" HIGH CARDS:*** Holders are cast aluminum and attach flush to end panels with screws. Satin aluminum finish only. (Labels and protectors not included.)

***CARD HOLDER FOR 4" HIGH X OPTION WIDTH:*** Holders are extruded aluminum with width as specified up to 24-1/2". Satin aluminum finish only. (Labels and protectors are not included.)

## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

***CASCADE NEWSPAPER DISPLAY:*** Available for 6 or 10 newspapers. The newspaper display unit consists of six parts: 1 pair of newspaper file brackets, 2 gussets, and 2 adjustable mounting spacers.

File brackets are 14-gauge steel and triangular shape, formed at the rear with a 1" flange. One and one-quarter inch (1-1/4") wide round end notches are provided at 4" intervals along the front edge to accept standard newspaper file sticks and to display the newspapers in a cascade fashion. Two gussets are provided at the bottom to prevent longitudinal movement. The gussets are 16-gauge steel, triangular in shape, formed on two sides with one 1-1/2" 90 degree bend and perforated to engage with the holes in the mounting spacers. Mounting spacers are 18-gauge steel, formed into a "C" shaped channel, 2-3/4" across the web with 1/2" top and bottom flanges and 1/4" return flanges. Holes 7/32" diameter are provided on 3" centers continuously through the center line of the web to allow adjustability of file stick brackets. Hooks are provided at each end to allow for engagement into slots in the stack uprights. Gussets, mounting spacers and brackets are assembled together with #10-24 pan head machine screws and hex nuts. Overall dimensions of 6 file display unit is 11" deep x 24-1/4" high; of 10 file display unit is 14-9/16" deep x 39-1/2" high (all dimensions are actual). Newspaper files, natural finished hardwood, 34-1/2" long, not included.

***COAT RACK:*** The coat rack consists of three parts: the coat rod and two supporting brackets. The coat rod is 16 gauge, 1" diameter tubing, 35" long. It is supported at each end by 16-gauge steel channels, perforated to accept the rod and for attachment to the stack uprights. Two mounting brackets complete with hardware are supplied.

***COMPACT DISC/AUDIO CASSETTE SHELVES:*** Shelves are one-piece 16-gauge steel, formed at the edge with three 90 degree bends, creating a hollow square in section. The rear edge is formed with one 90-degree bend. Shelf ends are perforated to permit attachment of shelf brackets with aluminum drive rivets, two per shelf end. Shelf brackets are 10-gauge steel projecting 1-5/16" above and 3-7/16" below the shelf. Brackets are perforated to receive drive rivet attachment to shelf. The rear edge of each bracket has three notched hooks to engage the slots in the stack uprights.

Mounted on the shelf are two wire racks, each mounted on rolling slides. Each rack is made of vinyl coated #8gauge wire. The racks are mounted on a steel pull-out slide mechanism with nylon rollers. There is an indent in the slide to insure the rack remains in a closed position when not in use. This indent also prevents accidental removal, however, the rack is easily removable and interchangeable with other racks./ The rack is single tier and will house 39 audio cassettes or 78 compact discs or a combination of both, spine up. Total shelf capacity is 78 audio cassettes or 156 compact disc. Assembled shelf projects 18" from stack uprights.

***CORNER FILLERS:*** Corner fillers, when required, are provided at junctions of single-faced stack ranges where they meet in the corner of a room. Corner fillers are three-piece construction consisting of two flat sheets of 19-gauge steel, slightly deeper than, and the same height as, the stack. A corner connection angle, 19 gauge, formed 90 degrees 1" x 1" x stack height is furnished to form closed corner filler at the intersection of the two flat panels. Fillers can be provided with a dust cap or HPL tops can be specified.

## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

***DIVIDER SHELVES:*** Shelves are one-piece 18-gauge steel with the front edge formed down with three 90-degree bends forming a hollow square in section. The back edge of the shelf is formed up 5" to receive slots for the placement of adjustable dividers. One row of slots is located at the bottom front of the shelf, and two rows of slots are in the shelf back. Slots for divider adjustment are placed 1" on center across the width of the shelf. Each shelf is supplied with a pair of 16-gauge shelf brackets. Shelf has an actual width of 35-7/16".

Dividers are 19-gauge steel, 6-1/2" high by depth of shelf. Divider has a formed hook at the bottom front and a hook and safety lug on the rear edge. Hooks and lugs engage in slots in the shelves and are adjustable every inch.

***STEEL END PANELS:*** Panels shall extend full width and height of unit and shall be one-piece construction formed flush with 1-3/4" thick square edge and exposed return flanges. Tops to be tightly closed with separate 16-gauge stiffening angles. Centers of double-faced panels to be furnished with full height channels for attaching to uprights, also to deaden sound and eliminate "oil canning".

***FILM REEL SHELVES:*** Film reel shelves have standard Library Bureau support brackets and are for use in standard 3' sections. Film reel rack has 11-gauge wire formed to receive reels with wire welded to front and rear support angles. Each reel rack shelf has a label holder attached to the front edge that is continuous and receives individual labels for each reel position. Individual labels are furnished.

Reel rack shelves are available in three sizes:

LRK 4-3: Rack is 5-5/8" deep x 3-7/8" high with 1" wire spacing. It is mounted on 10" deep brackets and will hold twenty-seven (27) 16 mm metal reel cans (400' reels).

LRK 16-3: Rack is 8" deep x 5-5/8" high with 1-1/8" wire spacing. It is mounted on 12" deep brackets and will hold twenty-six (26) 16 mm metal reel cans (400' reels).

LPC: As above on 12" brackets with 1-1/2" wire spacings for use with plastic reel case. Holds twenty-three (23) 400' reels.

***FIXED PERIODICAL SHELF:*** Shelves shall be sloping at approximately 55 degrees. Display shelf shall have a 7/8" lip at bottom and to be 12" deep x 12" H.

***FLAT STORAGE SHELF:*** Shelf shall be same as flat book shelf, 12" deep and mounted on inverted brackets for "continuous" placement in range. Fixed periodical display shelves and flat storage shelves alternate on stack upright. Shelves are ordered separately.

***FLAT NEWSPAPER SHELVES:*** Shelves are one-piece 16-gauge steel, formed at the front edge with three 90 degree bends, creating a hollow square in section. The rear edge is formed with one 90 degree bend. Shelf ends are perforated to permit attachment of shelf brackets with aluminum drive rivets, two per shelf end. Shelf brackets are 10-gauge steel projecting 1-5/16" above and 3-7/16" below the shelf. Brackets are perforated to receive drive rivet attachment to shelf. The rear edge of each bracket has three notched hooks to engage the slots in the stack uprights. Assembled flat newspaper shelf projects 18" from stack uprights.

## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

***FLIPPER DOOR UNIT:*** These units are designed to hang on the stack uprights on 13" vertical centers. Each assembly consists of two main components: the shell which consists of a top, back, bottom and two ends; and a door assembly consisting of the door and a cylinder lock with a key removal only in the locked position.

***HANGING BAG RACK:*** Rack consists of two adjustable inverted brackets of 13-gauge steel and two stainless steel rods 3/8" diameter by 35-7/16" long. The rods are tapped in each end to receive machine bolts passing through holes in the bracket and into the end of the rod. The rear edge of the bracket has three notched hooks to engage the perforated slots in the stack uprights.

***HINGED PERIODICAL DISPLAY AND STORAGE SHELVES:*** Display shelf shall have a 17 degree slope with a flat storage shelf underneath. Display shelves operate on 16-gauge pivot plates with plastic bearing attached to shelf brackets. Rubber bumpers are to be provided for each shelf. Shelves provide 12" high display (or 14" high when specified) with flat storage space (with optional dividers and backs when specified).

***HORIZONTAL NEWSPAPER DISPLAY:*** Rack consists of left and right hand bracket assemblies and hardware for attaching brackets to stack uprights using 1/4"-#20 round head machine screws which pass through the slots in the uprights into a 1/4"-#20 strap nut. The brackets extend 11" beyond the face of the upright. Each bracket is 16-gauge steel and is equipped to hold seven newspaper files horizontally between stack uprights. Newspaper files, natural finished hardwood, 34-1/2" long, not included.

***HPL TOPS:*** Provide continuous tops 1-1/4" thick or as specified with 1/16" high pressure laminate as selected over suitable solid cores. Provide approved balancing backer sheet. Support with 13-gauge brackets engaged into web of uprights.

***SHELF LABEL HOLDERS:*** Holders are clear plastic to clip on shelf front edge and receive labels 5/8" high x 5" long. (Labels included.)

***MICROFILM/CASSETTE SHELF:*** Shelves are a two-tier design, one-piece, 18-gauge steel. Each tier is 4" deep with an integral back 3" high. Each tier tilts down toward the back 5 degrees to prevent stored media from falling forward. Microfilm capacity is 42. Audio cassette capacity is 110. Supporting brackets are the same basic design as for book shelves with a 9-1/4" actual depth. The bracket is attached to the shelf with four machine screws and hex nuts or drive rivets.

***MULTI-PURPOSE DISPLAY SHELVES:*** shelves are one piece 18 gauge steel formed at the front and rear with three 90 degree bends. The shelf ends are turned down 90 degrees to form a proper connection with the shelf brackets. The front face of the shelf shall be 13/16" thick and designed to carry a uniformly distributed load of 50 pounds per linear foot without deflection in excess of 3/16". The multi-purpose display shelf in the flat or standard position will allow for a 8" actual shelf with a 5-1/8" integral back. When bolted into the sloping position with 1/4-20 nuts and bolts, the shelf will allow a 5-1/3" deep actual shelf with an 8" integral back to prevent material from falling off. Multi-purpose display shelves for standard 36" wide sections shall measure 35-7/16" clear between shelf brackets. Shelf is supplied with two 9" actual shelf brackets.

## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

***PAPERBACK/VIDEOCASSETTE SHELF:*** Shelf is designed for storage and/or display of various media types; i.e., paperback books, compact discs, VHS or Beta video cassettes, etc. The shelf is one-piece, 18-gauge steel with an actual depth of 6" and an actual width of 35-7/16". The front is formed in a box shape with three 90 degree bends with front face of shelf being 13/16" thick. The back of the shelf is formed with two 90 degree bends, one vertically 5" high with a return to the rear 3/8". The shelf's bed and back are slotted 1" on center to accept 6-1/2" high adjustable plate dividers. Six dividers are furnished with each shelf. The ends of the shelf are formed down 90 degrees to engage the interlocking lugs of the 16gauge support bracket. The bracket is designed to support the shelf and to tilt the shelf down toward the rear 8 degrees. This prevents the stored or displayed media from falling forward and also presents a more comfortable viewing angle.

***PENINSULAR FILLERS:*** Peninsular fillers are designed to form a closed juncture where wall ranges are joined to double-faced ranges at right angles. Fillers are constructed the same as the corner fillers except they are six-piece construction consisting of four flat sheets of 19-gauge steel and two 19-gauge 1" x 1" full height angles. Fillers can be provided with a dust cap or HPL tops can be specified.

***PLEXIGLAS COVER:*** Attached to a hinged periodical shelf, this cover is used to protect current issues of periodicals while leaving them completely visible. Constructed of 3/16" thick x 11" high x 33" long plexiglas it attaches to the top edge of the shelf with a piano hinge.

***RANGE FINDERS:*** Range finders are one-piece construction of 11-gauge aluminum formed "V" shaped to hold cards 5" wide x 3" high on each face of the "V". Satin finish aluminum only. (Labels and protectors included.)

***SHELF BRACKETS:*** Plate brackets for the ends of adjustable shelves are 16-gauge steel with a neatly angled front edge and out turned flanges. Brackets are 7-1/8" high and the full depth of the shelf. The brackets are securely fastened to the shelf by interlocking lugs formed at the bottom of each bracket designed to prevent accidental movement or removal. The rear edge of each bracket is formed with a notched hook and a rounded safety lug. Bracket hooks shall intermember with the slots on the uprights. The safety lug shall also intermember with the upright slots and be properly designed to prevent unintentional lifting of shelf assemblies and to prevent lateral movement of the shelves. The out-turned flange of the bracket prevents knifing of books and material when placing them on the shelves. Automatic spacing and alignment is achieved by safety spacers formed into the bracket in the upper front portion.

***SLIDING REFERENCE SHELVES:*** To be 18-gauge steel attached to underside of book shelves, extending same depth of shelf when fully extended. They shall operate on ball bearing extension slides attached to shelf brackets.

***STACK CARREL DESK:*** To be 35-7/8" wide x 24" deep high pressure laminate work surface and edges and suitable backer sheet. Desk top supported by inverted steel brackets with three hooks to engage steel uprights. (Furnish steel front legs with adjustable glides when specified.)

## ***LIBRARY BUREAU STEEL SAFESTAK SPECIFICATIONS***

***STORAGE LOCKER:*** Stack storage lockers are designed to hang on the stack uprights at 18" centers. Each locker is divided into two compartments, each with a lockable hinged door. The lockers consist of the following basic parts: two 16-gauge steel ends, each notched along the rear edge to form six hooks designed to engage the stack uprights; one shell formed to create a top, back, and bottom; one center divider assembly; and two hinged and lockable doors. The front, bottom edges of the 19-gauge top and bottom are formed into a channel shape. The partition assembly consists of two 16-gauge pieces. The main portion is channel-shaped at the front edge and formed with a 90-degree bend on the other three edges. The second part is a channel-shaped member spot welded top the main member along the front vertical edge. The 18-gauge steel doors are perforated with rectangular slots in the center portion to allow for ventilation and content viewing. Three edges are formed 90 degrees and the lock edge is formed in a channel shape. The doors are equipped with cylinder locks with the keys removable only in the locked position. Overall dimensions are 35-5/8" wide; 17-7/8" high; 11-3/16" deep from the face of the upright. The clear inside dimensions of each compartment are 16-1/2" W; 16-1/8" H; 10-7/16" D.

***STRUT CHANNEL (OPTIONAL):*** Under certain conditions required by non-freestanding bookstack, strut channels may be specified. Strut channels shall be formed "C" shaped of 16-gauge steel 2" wide with upturned legs 1-3/16" high and inward flanges 1/2" wide. Channels to be installed at right angles to stack ranges with necessary splices and wall anchors.

***DVD-VHS VIDEO CASSETTE SHELVES:*** Shelves are one-piece 16-gauge steel, formed at the edge with three 90 degree bends, creating a hollow square in section. The rear edge is formed with one 90 degree bend. Shelf ends are perforated to permit attachment of shelf brackets with aluminum drive rivets, two per shelf end. Shelf brackets are 10-gauge steel projecting 1-5/16" above and 3-7/16" below the shelf. Brackets are perforated to receive drive rivet attachment to shelf. The rear edge of each bracket has three notched hooks to engage the slots in the stack uprights. Mounted on the shelf are three wire racks, each mounted on rolling slides. Each rack is made of vinyl coated #8-gauge wire. The racks are mounted on a steel pull out slide mechanism with nylon rollers. There is an indent in the slide to insure the rack remains in a closed position when not in use. This indent also prevents accidental removal, however, the rack is easily removable and interchangeable with other racks. The rack is double-tiered and will house 40 video cassettes (20 each tier). Total shelf capacity is 120 video cassettes. Assembled shelf [projects 18" from stack uprights.

***WALL HUNG UPRIGHTS:*** Wall hung uprights are designed for attaching directly to a wall and will accept any Library Bureau shelf. Method and type of wall anchor will be determined by wall type. Uprights are "C"-shaped channels 2" across the face with returns of 1-3/16" and 1/2" return flanges. Faces are perforated with two rows of 1/4" x 5/8" rectangular slots to receive hooks and safety lugs on the shelf brackets. Every fifth and sixth slot are clearly marked for convenient shelf hanging and adjusting. On the center line of the face, holes are pierced every 16" for wall anchoring. Uprights are standard in 90", 66" and 42" heights. Other heights are available upon request.

***ZIG-ZAG SHELF INSERT:*** This insert is used to convert a standard flat 36" shelf into a spine-out or face-out display unit. The one-piece insert is formed with 6 display areas; each with two 4" deep faces that display media at a 45 degree angle to the front of the shelf. The insert is attached to the shelf with either double-sided tape or with sheet metal screws. Overall dimensions of insert are 34-1/2" wide x 7" high.

# LIBRARY BUREAU STEEL

## CLOSED BASE –UNIT CONSTRUCTION Bookstack General Specifications

**DESIGN:** Welded frame construction in modular, single or double face free-standing sections with closed bases and flexible design to mix and match all steel shelves, wood /laminate fascia on steel shelves or all wood shelves and component parts to create traditional or custom designs.

**SCOPE OF WORK:** This specification covers all materials of library steel bracket type bookstack. All unit heights, depths and accessories to be as indicated on floor plans, specifications or list of equipment. Where required, all bookstack will be properly anchored and secured in an inconspicuous manner according to manufacturer's specifications. Anchors to be determined by field conditions in accordance with local codes and seismic requirements. Specific anchors are not included as part of this specification.

**MATERIALS AND WORKMANSHIP:** Only the finest materials and quality workmanship will be acceptable and manufactured in the United States of America. Gauge thicknesses are U.S. Standard with the following minimum requirements:

1. Adjustable Shelf Brackets - 16 gauge
2. Steel Shelves - 18 gauge
3. Optional Wood/Laminate or Steel with Wood/Laminate Fascia
4. Frame - 16 gauge welded 5-sided channel structure
5. Web Stiffener - 13 gauge
6. Base Bracket -- 16 gauge

**CAPACITY REQUIREMENTS:** Each shelf shall have a minimum clearance between brackets of 35-3/8" and support 50 pounds per linear foot minimum.

**FINISH:** All parts except woods or laminates shall be automatically washed and phosphate coated in preparation to receive a electrostatic applied powder paint polymer finish coat. Wood or laminate components are finished on all exposed surfaces and field assembled using wood screws through the holes provided.

**COLOR:** To be selected from ESF's 48 standard colors (unless otherwise specified).

**TYPE OF BOOKSTACK:** Adjustable shelves hang on a central upright column in a cantilever manner allowing a wide flexibility of sizes and full compliment of accessories in any combination of 24", 30" and standard 36" widths, 42", 66", 78", 84" and 90" heights and 7" through 16" deep shelves on 1" increments.

**WARRANTY:** Five (5) years against defective workmanship and material after date of delivery and installation by manufacturer's authorized representative. Manufacturer will adjust or replace defective parts in all cases except by reason of ordinary wear or use, misuse, negligence, accident, fire, water damage, improper handling or storage and all other reasons beyond the control of the manufacturer.



# LIBRARY BUREAU STEEL

## CLOSED BASE –UNIT CONSTRUCTION Bookstack General Specifications

- a) **WELDED FRAME:** Welded frame consists of two upright columns and one each top and bottom spreader. Each spreader is welded between upright columns with 1-1/4" of weld on each face for a total of 12" of weld for the entire weld frame. Components are described as in items b.
- b) **UPRIGHT COLUMNS and SPREADERS:** Used as components in weld frame above is 16 gauge channel shape with no less than 1/2" stiffening flanges measuring 2" into the web and 1-3/16" at front and rear surfaces. Uprights are perforated with a series of 1/4" x 5/8" slots spaced 1" on vertical centers. Every fifth and sixth slot to be shaped differently for ease of shifting adjustable shelves.
- c) **WEB STIFFENERS:** Shall be 13 GA. A minimum of 2" wide and shorter than uprights on all stacks over 66" high, keyed to engage base brackets to form a continuous structural member from floor to top of stack. Web is bolted between welded frames with 3/8" nuts and bolts.
- d) **SHELF BRACKETS:** Plate brackets for the ends of adjustable shelves are 16 gauge steel with a neatly angled front edge. Brackets are 7-1/8" high and the full depth of the shelf. The brackets are securely fastened to the shelf by interlocking hem formed at the bottom of each bracket designed to prevent accidental movement or removal. The rear edge of each bracket is formed with a notched hook and a rounded safety lug. Bracket hooks shall inter-member with the slots on the uprights. The safety lug shall also inter-member with the upright slots and shall be properly designed to prevent unintentional lifting of shelf assemblies and to prevent lateral movement of the shelves. Brackets for wood/laminate shelves have 2 holes per bracket to wood screw fasten wood/laminate shelves.
- e) **BASE BRACKETS:** Shall be designed to fit between uprights. Material shall no less than 16 GA. Brackets to have a 90 degree flange at bottom to rest on floor with outer ends punched to receive leveling glides, when specified. Top and front edge of base brackets angled to match adjustable shelf brackets and to allow nesting adjustable shelves into base shelf area if desired.
- f) **CLOSED BASE SHELVES:** Shall be formed to meet industry performance standards of 50 pounds per foot without deflection in excess of 3/16". One piece construction designed to fit snugly around upright columns and base brackets without need of hardware fasteners. Front height shall be at least 3' and sides shall have stiffening flanges, designed to inter-member with base bracket slots. The shelf is 3/4" smaller to allow for the wood or laminate fascia,
- g) **ADJUSTABLE STEEL SHELVES:** Shelves are one-piece, 18 gauge steel formed at both front and rear with three 90 degree bends. Each bend is slightly rounded. This design not only adds greatly to the strength of the shelf, but allows for the use of various accessory items such as wire book supports, hook-on book supports and clip-on label holders. Shelf ends are turned down 90 degrees to form a proper connection with the shelf brackets. The front face of the shelf shall be 13/16" thick and designed to carry a uniformly distributed load of 50 pounds per lineal foot without deflection in excess of 3/16". Adjustable shelves for standard 36" wide sections shall measure 35-3/8" clear between shelf brackets. Actual depth of shelf is 1" less than nominal. The shelf is 3/4" smaller to allow for the wood or laminate fascia to wood screw assemble in the field.

# LIBRARY BUREAU STEEL

## CLOSED BASE –UNIT CONSTRUCTION Bookstack General Specifications

h) **SHELVES AND ACCESSORIES:** All flat, divider and accessories may be used in any combination. The shelves and canopy tops are  $\frac{3}{4}$ " smaller to allow for the wood or laminate fascia when specified.

i) **ADJUSTABLE WOOD SHELVES:** Uses Brackets for wood/laminate shelves have 2 holes per bracket to wood screw fasten wood/laminate shelves.

j) **DIVIDER SHELVES AND BASES:** Shelves are one-piece 18 gauge steel with the front edge formed down with three 90 degree bends forming a hollow square in section. The back edge of the shelf is formed up 5" to receive slots for the placement of adjustable dividers. One row of slots is located at the bottom front of the shelf, and two rows of slots are in the shelf back. Slots for divider adjustment are placed 1" on center across the width of the shelf. Each shelf is supplied with a pair of 16 gauge shelf brackets. Shelf has an actual width of 35-7/16". The shelf is  $\frac{3}{4}$ " smaller to allow for the wood or laminate fascia field installation.

Dividers are 18 gauge steel, 6-1/2" high by depth of shelf. Divider has a formed hook at the bottom front and a hook and safety lug on the rear edge. Hooks and lugs engage in slots in the shelves and are adjustable on 1" centers.

k) **HARDWARE:** Shall be rust proof, cadmium or zinc plated or equal and shall be completely concealed from view in finished assembly with no projections to harm material or users.

### ARCITECTURAL NOTES:

1) LIBRARY BUREAU STEEL Shelving System can be configured to meet all seismic zone requirements For Zones 0, 1, 2A, 2B, 3 and 4 as well as the new emerging "MCE" Values.

2) LIBRARY BUREAU STEEL Shelving System has been designed to meet all American Library Association Guidelines and Standards.

3) LIBRARY BUREAU STEEL Shelving System uses low temperature curing powder coated paint with no VOC's (volatile organic compounds) and formulated to produce an anti-marring finish that resists abrasion caused by the hard bound book bindings.

4) LIBRARY BUREAU STEEL Shelving Systems uses recycled steel, powder and bulk packs to minimize the impact on the environment.

5) LIBRARY BUREAU STEEL Shelving System meets the new CAL 130 and Boston Fire Code Specifications with regard to the overall flammability content of newly designed and renovated public and private buildings. Hence, the specification of a stronger, more durable wood/laminate trimmed steel product choice over an all wood/laminate case type product may also lower fire insurance premiums as part of an overall plan to reduce flammable content while retaining the elegance, warmth and beauty of wood/laminate not just on the end panels but down the aisles as well.