## mediatechnologies®

## Installation and Assembly Instruction Guide

Bookmark Charleston<br>Heritage<br>Malibu<br>31 Series<br>Definitions<br>Lexington<br>Metro



## Table of Contents

Wood Frame Shelving (All Lines) Single Sided ..... 5-9
Double Sided ..... 10-14
Steel Frame Shelving
31 Series \& Revaes ..... 15-18
31 Series Magazine Shelving ..... 19
31 Series Mobile Shelving ..... 20
Carrels (All Lines)
Panel End ..... 21-23
Hex ..... 24-26
Wood Tables (All Lines) ..... 26
Charleston ..... 29
Newspaper Rack ..... 30

# Wood Frame Shelving Single Faced 

Bookmark • Metro •<br>Lexington•Charleston<br>Heritage • Malibu

| Bookcases - shelving per unit |  |
| :--- | :--- |
| Dimension | \# of shelves |
| $30^{\prime \prime} \mathrm{H}$ | 1 adjustable |
| $36^{\prime \prime} \mathrm{H}$ | 2 adjustable |
| $42^{\prime \prime} \mathrm{H}$ | 2 adjustable |
| $48^{\prime \prime} \mathrm{H}$ | 2 adjustable |
| $60^{\prime \prime} \mathrm{H}$ | 3 adjustable |
| $72^{\prime \prime} \mathrm{H}$ | 4 adjustable |
| $84^{\prime \prime} \mathrm{H}$ | 5 adjustable |
| $90^{\prime \prime} \mathrm{H}$ | 6 adjustable |

## Wood Frame Shelving, Single Faced



## ATTENTION: UNITS ARE ASSEMBLED STANDING UP



## STEP 1 - Attaching the bottoms to the sides

## For Initial Bookshelf Unit:

Attach the bottom frame to one end panel with the (4) ${ }^{5} / 16-18 \times 1^{3} / 4^{\prime \prime}$ bolts and washers.

- Save second end panel for the end of run- if assembling stand alone unit attach second end panel now.
- Position bottom frame with groove facing up and align with groove in side panel.



## For Adder Units:

Attach one bottom frame to the intermediate panel and the next bottom frame with ${ }^{5} / 16-18 \times 3^{1} / 2^{1 "}$ bolts and washers

- Grooves on all initial and adder units should be installed toward the bookshelf back.


Lay out all initial, adder and end units but
DO NOT tighten bolts, yet.

- All bottoms must be level relative to each other.
- Glides are available for all shelving. If optional glides are purchased they will be installed in factory and may need to



# Wood Frame Shelving, Single Faced 



Back in bottom frame groove for single-sided shelving

## STEP 2 - Attaching the backs

Slip the back into the grooves in the side panels and bottom frame. The side panels will push outward because the bolts on the bottom frame are not tightened.

- Start sliding the back into the groove at a height in which the width of the back will fit in the grooves so as not to scratch the side panels.



## STEP 3 - Attaching the " $Z$ " brackets

(For units taller than 72" skip to STEP 5)
For Initial Bookshelf Unit:
Loosely attach the (2) " Z " brackets to the sides using the (4) $/ / w-18$ $x^{3 / 4} / 4^{4}$ bolts.

## For Adder Units:

Use (2) ${ }^{5} / 16-18 \times 1^{3} / 4$ " bolts and nuts to bolt through both "Z" brackets on either side of each end panel

## STEP 4 - Attaching the tops

Properly position the top slightly below top edge of side panels and fasten it to the " $Z$ " brackets using the (4) \#8 $x^{5} / 8$ " screws.

- A groove in the rear valance of a single-sided top captures the back panel.
- Make sure back edge of top is flush with back edge of end panel


## For Attaching Common Tops: See separate instruction sheet insert

Note: Common tops span multiple bookcases and a slightly modified bookcase design is used for units receiving common tops.

- End panels do not receive edgebanding on top edge.
- End panels will have threaded inserts near top edge for attaching the valance box.

For single faced units, common top aligns flush with back of unit and overhangs on front and side edges.

Note: Common tops for longer runs of bookcases may be manufactured in sections. Sectioned tops will be assembled using tight joints and splines.

# Wood Frame Shelving, Single Faced 



## (For units 72" and shorter skip to STEP 7)

STEP 5 - Attaching " $Z$ " brackets - units taller than 72"

## For Initial Bookshelf Unit:

The smallest arm of the "Z" bracket should be pointing down as you screw it LOOSELY to the end panels using the $5 / 16-18 x^{3} / 4^{\prime \prime}$ bolts.

- There are 2 " $Z$ " brackets on single-sided units


## For Adder Units:

Use (2) ${ }^{5} / 16-18 \times 1^{3} / 4$ " bolts and nuts to bolt through both " $Z$ " brackets on either side of each end panel.


STEP 6 - Attaching the tops to units taller than 72"
Angle the back of the top higher than the front to slide it under the " $Z$ " brackets and over the back panel.

Lower the back of the top so the groove in the rear cornice of a single-sided top captures the back panel. At the same time, raise the front of the top so that the " $Z$ " brackets slip into the grooves on either end of the top of the top.

Screw into place using the (4) \#8 $x^{5} / 8^{\prime \prime}$ screws.
Make sure the back edge of the top is flush with the back edge of the end panels then tighten the $5 / 16-18$ bolts.

FLUSH $\longrightarrow$
then tighten hex bolts LAST


REMEMBER STEP 7

STEP 7 - Now tighten all bolts!
Go back and tighten all bolts from previous steps.


## STEP 8 - Attaching the bottom shelf

Position the bottom shelf onto the toe frame with the back edge flush to the back panel and the finished front edge slightly overhanging the front of the toe frame. Screw down using the (2) \#8 $\times 1^{1} / 2^{\prime \prime}$ screws. Toe frames are pre-drilled to receive the screws.

## Wood Frame Shelving, Single Faced



Fixed shelf pin


## STEP 9 - Installing shelves

For wood shelves: Slip round pin of shelf clips into appropriate line holes in side panels and lower shelf into place so pointed portion of shelf clip is inserted into pre-drilled holes on underside of shelf.

For steel shelves: Slip shouldered pins into aligned holes in side panels and install shelves ( 4 pins per shelf).

## For fixed wood shelves on units taller than 48":

On shelving units taller than 48" a fixed shelf will be installed at midheight of each bookcase in the run (as shown below). Fixed shelves
 should be placed mid-height of bookcase and attached to the panels using fixed shelf pins tightened into the pre-drilled holes.


For fixed STEEL SHELVES on units taller:than 48"


Varianta Screw

Substitute (4) Varianta screws for standard steel shelf pins on a middle shelf of the each book case in the run.


2 Varitana screws on each end of shelf


## STEP 10 - Installing magazine shelves

Note: There is one less magazine/standard shelf combo per face than on a similar height standard shelving unit.

Insert one shelf clip into pre-drilled hole in underside of magazine shelf far enough forward so that shelf can rotate freely and secure with a small screw ( $\# 8 \mathrm{X}^{5} / 8^{\prime \prime}$ or equiv.) Place post of shelf clip into appropriate line hole. Now place post of second shelf clip into appropriate line hole on other side and position shelf onto clip. Attach second clip to underside of shelf.


## NOTE FOR STABILITY:

All single faced units 48 "H and higher must be secured to the wall by screwing through the valance into the wall using the appropriate anchor for the wall type.

For all single faced units under 48"H we still recommend that they are secured to the wall with screws through the valance and into the wall.

# Wood Frame Shelving Double Faced 

Bookmark<br>Metro<br>Lexington<br>Charleston<br>Heritage<br>Malibu

## Wood Frame Shelving, Double Faced

ATTENTION: UNITS ARE ASSEMBLED STANDING UP


## STEP 1 - Attaching the bottoms to the sides

## For Initial Bookshelf Unit:

Attach the bottom frame to one end panel with the (4) ${ }^{5} / 16-18 x$ $1^{3} / 4^{\prime \prime}$ bolts and washers.

- Save second end panel for the end of run- if assembling stand alone unit attach second end panel now.
- Double faced units- Use two bottom frames with groove facing up, and unfinished edges face to face. The seam between them aligns with groove in side panel.


## For Adder Units:

Attach two bottom frames to the intermediate panel and the next two bottom frames with ${ }^{5} / 16-18 \times 3^{1} / 2^{\prime \prime}$ bolts, nuts and washers

- The seam between two bottom frames aligns with groove in side panel.


Lay out all initial, adder and end units but DO NOT tighten bolts, yet.

- All bottoms must be level relative to each other.
- Glides are available for all shelving. If optional glides are purchased they will be installed in factory and may need to be spun to level. If no glides are purchased you may have to shim, if necessary.


## Wood Frame Shelving, Double Faced



## STEP 2 - Attaching the backs

(For units taller than 72" skip to STEP 5)
Slip the back into the grooves in the side panels and lower onto the top of the bottom frame. The back on double units is captured by the bottom shelves, not the grooves in the bottom frame. Therefore these backs are $1-7 / 16^{\prime \prime}$ shorter than singles.

- The side panels will push outward because the bolts on the bottom frame are not tightened. Start sliding the back into the groove at a height in which the width of the back will fit in the grooves so as not to scratch the side panels.


## For Adder Units:

Use (2) ${ }^{5} / 16-18 \times 1^{3} / 4^{4}$ bolts and nuts to bolt through both " $Z$ " brackets on either side of each end panel


## STEP 4 - Attaching the tops

Properly position the top slightly below top edge of side panels and fasten it to the " $Z$ " brackets using the (8) \#8 $\times \frac{5}{5} / 8^{\prime \prime}$ screws.

- A groove in the center of a double-sided top captures the back panel.


## For Attaching Common Tops: See separate instruction sheet insert

Note: Common tops span multiple bookcases and a slightly modified bookcase design is used for units receiving common tops.

- End panels do not receive edgebanding on top edge.
- End panels will have threaded inserts near top edge for attaching the valance box.

For double faced units, common top overhangs on all four edges.
Note: Common tops for longer runs of bookcases will be manufactured in sections. Sectioned tops will be assembled using tight joints and splines.

# Wood Frame Shelving, Double Faced 



STEP 5 - Attaching " $Z$ " brackets - units taller than 72"
(For units 72" and shorter skip to STEP 7)

## For Initial Bookshelf Unit:

The smallest arm of the "Z" bracket should be pointing down as you screw it LOOSELY to the end panels using the $5 / 16-18 x^{3} / 4^{\prime \prime}$ bolts.

- There are 4 " $Z$ " brackets on double-sided units


## For Adder Units:

Use (2) ${ }^{5} / 16-18 \times 1^{3} / 4^{\prime \prime}$ bolts and nuts to bolt through both " Z " brackets on either side of each end panel. Do this on only one side of all double sided bookstacks.


CENTER then tighten bolts LAST

## STEP 6- Attaching the tops to units taller

 than 72"Angle one front edge of the top higher than the other slide it under the " $Z$ " brackets and over the back panel.

Lower one front edge of the top so the groove in the middle of the double-sided top captures the back panel. At the same time, raise the other front edge of the top so that the " $Z$ " brackets slip into the grooves on either end of the top of the top.

Now LOOSELY screw on the other 2 " $Z$ " brackets to the double side of the bookstack using the $5 / 16-18 x^{3} / 4^{\prime \prime}$ bolts.

- Make sure to slide " $Z$ " bracket into groove in top.

Screw all 4 " $Z$ " brackets into place using the (4) \#8 $x^{5} / 8$ " screws.

Make sure the top is centered over both sides of the book stack then tighten the $5 / 16-18$ bolts.

## Wood Frame Shelving, Double Faced



## STEP 10 - Installing magazine shelves

Note: There is one less magazine/standard shelf combo per face than on a similar height standard shelving unit.

Insert one shelf clip into pre-drilled hole in underside of magazine shelf far enough forward so that shelf can rotate freely and secure with a small screw (\#8 $x^{5} / 8^{\prime \prime}$ or equiv.) Place post of shelf clip into appropriate line hole. Now place post of second shelf clip into appropriate line hole on other side and position shelf onto clip. Attach second clip to underside of shelf.

# Wood Frame Shelving, Double Faced, Mobile ATTENTION: UNITS ARE INITIALLY ASSEMBLED LAYING ON SIDE 




A
Align these two grooves


Back sits on bottom frame (not in grooves) for double-sided shelving

STEP 1 - Attaching the caster frame and toe unit to the sides for Mobile Bookshelf Unit:
Bolt both caster frame and toe assembly to end panel using 5/16$18 \times 1-3 / 4$ " bolts ( $1 / 2^{\prime \prime}$ hex head). Finger tight for now.

- Position middle toe with groove facing top of bookcase and align with groove in side panel.
- Washers are used in the center locations only.
- Repeat for second side panel
- Set unit upright


## STEP 2 - Attaching the back panel

Slip the back into the grooves in the side panels and lower onto the top of the bottom frame. The back on double units is captured by the bottom shelves, not the grooves in the bottom frame. Therefore these backs are $1-^{7} / 16^{\prime \prime}$ shorter than singles.

- The side panels will push outward because the bolts on the bottom frame are not tightened. Start sliding the back into the groove at a height in which the width of the back will fit in the grooves so as not to scratch the side panels.



## Wood Frame Shelving, Double Faced, Mobile



## STEP 3 - Attaching the " $Z$ " brackets

## For Initial Bookshelf Unit:

Loosely attach the (4) " $Z$ " brackets to the sides using the (4) $5 / 16-18 x^{3} / 4^{4}$ bolts.


B STEP 4 - Attaching the tops
Properly position the top slightly below top edge of side panels and fasten it to the " $Z$ " brackets using the ( 8 ) \#8 $x^{5} / 8$ " screws.

- A groove in the center of a double-sided top captures the back panel.

REMEMBER
STEP $5 \longrightarrow$ STEP 5- Now tighten all bolts and brackets!


STEP 6 - Attaching the bottom shelf
Position the bottom shelf onto the toe frame with the back edge flush to the back panel and the finished front edge slightly overhanging the front of the toe frame. Screw down using the (2) $\# 8 \times 1^{1 / 2 "}$ screws. Toe frames are pre-drilled to receive the screws.

## STEP 7 - Installing shelves

Install shelves as indicated in instrucftions for standard Wood Frame Shelving Double Faced.

# Steel Frame Shelving 

## 31 Series

| Bookcases - shelving per unit |  |
| :--- | :--- |
| Dimension | \# of shelves |
| $30^{\prime \prime} \mathrm{H}$ | 1 adjustable |
| $36^{\prime \prime} \mathrm{H}$ | 2 adjustable |
| $42^{\prime \prime} \mathrm{H}$ | 2 adjustable |
| $48^{\prime \prime} \mathrm{H}$ | 2 adjustable |
| $60^{\prime \prime} \mathrm{H}$ | 3 adjustable |
| $72^{\prime \prime} \mathrm{H}$ | 4 adjustable |
| $84^{\prime \prime} \mathrm{H}$ | 5 adjustable |
| $90^{\prime \prime} \mathrm{H}$ | 6 adjustable |



Steel Frames- see STEP 1a Back Panels- see STEP 1b

## STEP 1- Attaching side panels to steel frames

## For Starter Units:

Attach the tubular steel frames to an end panel using the shorter ( $1^{3} / 4^{1}$ ) connector bolt and nut

- Make sure shelf pin hole lines face in towards shelves
- Single-sided units have specific right and left end panels
- Single and Double-sided units 48 " and shorter use 1 tubular frame
- Single and Double-sided units over 48" use 2 tubular frames
- One person assembly can be started on the floor


## For Adder Units:

Bolt through one steel frame, then an intermediate panel, then the next steel frame with the longer $\left(2^{3} / 4^{\prime \prime}\right)$ connector bolt and nut

- For easier one person assembly you can attach steel frame(s) to end panel and first intermediate panel on the floor. Next attach toes (next page) then stand unit upright before adding additional frames and panels

Lay out all initial, adder and end units but DO NOT tighten bolts, yet.

- All bottoms must be level relative to each othershim if necessary.


Varianta Screw


## STEP 2 - Attaching the Toes

Screw the toe/bracket assembly to the side panels using the \#8 $x^{5} / 8^{1 "}$ screws.

Then attach the angle mounting brackets to either end of the rear face of the toes by screwing the \# $8 \mathrm{x}^{5} / 8^{1 "}$ screws.

- Toes will be offset to the inside of the front edge of the side panels but should be flush with the bottom of the panel.
- One toe is provided for single unit and two toes are provided for each double-sided unit


## STEP 3 - Attaching the Tops

Screw the short cam studs into every pre-bored 5 mm holes at the top of each face of each side panel.

- 2 holes in a single end panel, 4 holes in a single intermediate panel or double-sided end panel, 8 holes in an double-sided intermediate panel

Insert cams into pre-drilled holes in top, then align cams onto the studs and tighten the cam about $1 / 4$ turn clockwise.

- Make sure the unfinished edge of a single top faces to the rear


## STEP 4 - Installing Fixed Shelves in units taller THAN 48" <br> (For Units 48" and shorter, skip to STEP 5. Mobile units proceed to STEP 4a)

## VARIANTA SCREWS MUST BE INSTALLED ON TALLER UNITS

Shouldered pins must be replaced with Varianta screws on mid-height shelves of all the bookcases in the run.

Note: Units not using the optional tops must also substitute Varianta screws for the top shelves.


2 Varianta screws on each end of shelf in each bookcase of the run

## Steel Frame Shelving

## STEP 4a - Installing Fixed Shelves in Double Faced units taller than 48" <br> (For Units 48" and shorter, skip to STEP 5. Mobile units see below) <br> For fixed STEEL SHELVES on units taller than 48":

Substitute (4) Varianta Screws for standard steel shelf pins on a middle shelf of each bookcase in the run. Fixed shelves should be installed on one side of double unit. Install Varianta Screw w/ \#2 Pozi Drive.
FIXED SHELVES ARE REQUIRED ON ALL MOBILE UNITS:
A fixed shelf is required on mobile units. Install fixed steel shelves as indicated above. Install a fixed shelf in each bookcase in the run.

## STEP 5 - Installing Shelves

Slip shouldered pins into aligned holes in side panels and install shelves (4 pins per shelf)

- Pins in bottom line holes will hold the bottom shelf just above the toe


Standard 31 Series Shelf


[^0]
## 31 Series Magazine Shelf

## Installing magazine display shelf

Install standard adjustable shelf as usual and then rest magazine shelf on top of it.
Lift rear of shelf to desired tilt angle and slip smooth 5 mm shelf pins through the pivot slots in the rear of each side flange.

for 12"D shelves for 10 "D shelves


## Pivot and Store Feature

To use the pivot and store feature, just place two shelf pins in the two line holes opposite the smooth shelf pins that act as pivots for the magazine shelf.

- (1) Swing the shelf up so the additional shelf pins slip through one of the " $L$ " shaped slots in the side flanges
- (2) Push the shelf back to hold in place


## 31 Series Mobile Shelving

- Mobile 31 Series shelving is assembled in the same manner as standard, non-mobile 31 Series shelving with the exception of the toes and mobile shelving requires one fixed shelf.
- Individual toes and brackets are replaced by a toe frame, shipped assembled with casters and metal caster support frames.
- To assemble, simply bolt through the metal caster frame and toe frame into the threaded inserts at the bottom of the side panels using the $5 / 16^{\prime \prime} \times 1-3 / 4$ " bolts provided.



# 31 Series Mobile Shelving <br> ATTENTION: UNITS ARE INITIALLY ASSEMBLED LAYING ON SIDE 



- Mobile 31 Series shelving is assembled in the same manner as standard, non-mobile 31 Series shelving with the exception of the toes and mobile shelving requires one fixed shelf.
- Individual toes and brackets are replaced by a toe frame, shipped assembled with casters and metal caster support frames.



## STEP 1 - Attaching the cams

Lay end panels, outer face down, on a protected surface to avoid scratching. Screw cam bolts into pre-bored holes in top of side of both panels. Set one panel aside.

- The cam bolt must be installed so its shoulder is tight to the panel face. DO NOT OVERTIGHTEN and strip the wood.

Shoulder tight to panel face
DO NOT OVERTIGHTEN OR
STRIP (USE YOUR CLUTCH)


## STEP 2 - Attaching the caster frame and toe unit to the sides for Mobile Bookshelf Unit:

Bolt both caster frame and toe assembly to end panel using 5/16$18 \times 1-3 / 4$ " bolts (1/2" hex head). Finger tight for now.

- Washers are used in the center locations only.
- Repeat for second side panel
- Set unit upright



## STEP 3- Attaching side panels to steel frames

## For Starter Units:

Attach the tubular steel frame to an end panel using the shorter ( $1^{3} / 4^{\prime \prime}$ ) connector bolt and nut

- Make sure shelf pin hole lines face in towards shelves
- Double-sided Mobile units use 1 tubular frame
- One person assembly can be started on the floor



## STEP 4 - Attaching the Tops

Insert cams into pre-drilled holes in top, then align cams onto the studs and tighten the cam about $1 / 4$ turn clockwise.


Varianta Screw

## STEP 6a - Installing Fixed Shelves in Double Faced Mobile Units:

Substitute (4) Varianta Screws for standard steel shelf pins on a middle shelf of the bookcase. Fixed shelves should be installed on one side of double unit. Install Varianta Screw w/ \#2 Pozi Drive.



## STEP 6 - Installing Standard Steel Shelves

Install all adjustable steel shelves as shown in standard Steel Frame Shelving instructions.

# Carrel - Panel End 

Bookmark<br>Metro<br>Checkmate<br>Twist<br>Heritage<br>Malibu

## Panel End Carrel



## STEP 1 - Attaching levelers

Screw levelers into the 8 mm banded bottom edge of all end and intermediate panels. Actually level carrels last, once assembled.

ap back panel with clip down - panel with stud up) to engage

## STEP 2 - Attaching end and intermediate panels to back panels

Screw Mod-eez studs into holes in vertical center line of double end/ intermediate panels or back edge of single end/intermediate panels.

Slide Mod-eez studs into factory installed Mod-eez clips on either end of back panels.


## STEP 3 - Attaching Angle Brackets

Screw M6x ${ }^{1 / 2}$ " bolts through " $Z$ " bracket into brass inserts in end/intermediate panels finger tight only for now.

underside of worksurface

## STEP 4 - Attaching Worksurfaces

Position the worksurface onto the " $Z$ " brackets. Make sure the short end of the " $Z$ " bracket sits in the groove. Screw angle brackets to the underside of the worksurface using \#12 x 1" screws. Tighten bolts from Step 3.

## STEP 5 - Leveling Carrels

Adjust levelers up or down depending on need in order to level carrels.


## RADUIS CARREL WORKSURFACE

STEP 1 - Attach angle brackets
Attach angle brackets by screwing M6x1/2" bolts through " $Z$ " bracket into brass inserts in end panel finger tight only for now.


STEP 2 - Attach panel leg to end panel
Screw Mod-eez studs into holes in verticle center line of double end panels.

Slide Mod-eez studs into factory installed Mod-eez clips on end of panel leg.


## STEP 3 - Attach Radius Worksurface

Position worksurface onto angle brackets. Screw angle brackets to the underside of the worksurface using \#12 x 1" screws. Tighten bolts from Step 1.

STEP 4 - Connect Radius Worksurface to Panel Leg
Screw the 2 " $Z$ " brackets to both the panel leg and the under side of the worksurface on both sides of panel leg.

## Carrel - Hex

Bookmark<br>Definitions<br>Metro<br>Lexington<br>Charleston<br>Heritage<br>Malibu




## STEP 1 - Prepping Posts

Screw levelers into bottom of posts and Mod-eez studs into pre-drilled holes in each post.

## STEP2 - Assembling central hub

Attach panels to posts. Open end of each Mod-eez clip faces down. Slip studs on posts into clips on panels and tap down on panel to secure.

- The joint is mechanical and may be disassembled. Attach all but the last panel and proceed to step 3.



## STEP 3 - Installing power/data units

Slide power/data units into panel and secure from the inside of each panel using wing nuts.

- One panel has an access panel that is secured with two screws
Attach the last panel.



## STEP 4: Attaching hub top

Screw "Z" brackets on three alternating hub panels.
Hexagonal hub top sits on these small " $Z$ " brackets mounted at top of hub panels.
Place the hub top.


## STEP 5 - Attaching side panels

Assemble wing panels to hub by securing Mod-eez clips to remaining exposed studs on posts. Then level using adjustable glides.


## STEP 6 - Attaching angle brackets

Screw M6 x $1 / 2$ " bolts through " $Z$ " bracket into side panels. There should be a space for wires between the back edge of the worksurface and the central hub.

- Do not tighten bolts yet.


## \#12 x 1"

 screwLip engages groove in underside of worksurface


## STEP 7 - Attaching worksurfaces

Position worksurface onto "Z" brackets. Make sure the short end of the " $Z$ " bracket sits in the groove. Screw angle brackets to the underside of the worksurface using \#12 $\times 1$ " screws.

Attach all six work surfaces. Make sure all six are aligned evenly.

- Now tighten bolts.


## STEP 8 - Leveling Carrels

Adjust levelers up or down depending on need in order to level carrels.

## Wood Tables

## Wood Table Leg, Apron \& Support Keel

Tools Required:


Attaching steel mounting plate and leg to table top Attach leg plates (with attached legs) to table using the ${ }^{5} / 16-18 \mathrm{x}$ 1 " bolts. If installing optional aprons, do not completely tighten bolts and see Step 2. If no apron is being installed, tighten bolts now.

## Attaching optional aprons

Align apron between the legs on the table. The holes in the leg plate are oversized to allow you to position the leg and apron. Position the face of the apron just behind the leg edge radius and attach with the \#8 $\times 1-{ }^{1} / 4^{\prime \prime}$ screws. Finish tightening bolts from Step 1.

## Attaching table support keel

Center keel along midline and equal distance from each end. Attach using \#12 x 1" screws.


## Charleston Table

Tools Required:

Phillips head screwdriver
5/16 wrench
16 wrench

## Step 1 - Attaching the legs to apron

- For each leg, fit leg into outside corner of apron with predrilled hole facing inward and attach leg to corner bracket on apron using $5 / 16-18 x$ 2-1/2" bolt.


## Step 2 - Attaching apron and leg assembly to table top

- Place top upside down on clean, padded surface.
- Center apron and leg assembly onto underside of top.
- Attach using \#8 x $1-\frac{1}{-1} / 4^{\text {" }}$ screws in predrilled holes.

Tools Required:
Phillips head screwdriver


## STEP 1- Assembling table

Assemble legs, leg plates and aprons to underside of top. See "Bookmark Table Leg \& Apron Assembly Instructions"

## STEP 2- Aligning and attaching stick holders

Attach stick holders to either side of opening on top as shown, using \#8 $\times 2$ " screws, by screwing through top from below.

- Use a ${ }^{3} / 16^{\prime \prime}$ drill if clearance holes shown in top are not pre-bored.
- After mounting the first holder, use a newspaper stick to aid in aligning the second holder on the opposite side of the opening.


[^0]:    31 Series Magazine Shelf

