

Wallbeds Northwest

ENDURA CABINET PLANS AND INSTRUCTIONS

Thank you for purchasing your Wall Bed from Wallbeds Northwest.

If you have purchased a complete "Endura DIY Kit," then much of the work is already done for you. Please skip to assembly instructions. Note that some of the hardware may be slightly different than what is shown in the plans and instructions and is already included.

The following instructions are for building and installing a complete Endura Wall Bed cabinet and mechanism purchased from Wallbeds Northwest. These instructions are designed for an inexperienced builder to be able to put the Endura Wallbed together. If you are an experienced builder, then you may want to do some modifications or put it together with different materials.

CAUTION! PLEASE READ THROUGH THE DIRECTIONS BEFORE YOU PURCHASE ANY OF THE FOLLOWING ITEMS. SOME ITEMS CAN BE SUBSTITUTED WITH DIFFERENT MATERIALS.

If you are building everything yourself you will need most of the following hardware* and tools;

HARDWARE

- 100 - 1 1/4" WOOD SCREWS
- 8 to 12 - 3" DRY WALL SCREWS
- 110 - 3/4" WOOD SCREWS (Nickel)
- 8 - RAFIX CONNECTORS
- 26 - 2 1/2" "L" BRACKETS
- 34 - 2" CONFIRMAT SCREWS

TOOLS

- LEVEL
- LADDER
- WOOD GLUE
- STUD FINDER
- ELECTRIC DRILL
- TABLE SAW
- TAPE MEASURE
- COUNTERSINKS
- SOCKET SET
- CRESCENT WRENCH
- LARGE WOOD CLAMPS
- SLOTTED SCREW DRIVER
- DRILL BITS** - VARIOUS SIZES
- PHILLIPS HEAD SCREWDRIVER

* If you purchased a complete Wall Bed Mechanism **and Cabinet**, the hardware is included.

****Note: Some Pre-drilling is necessary for Confirmat Screws - 3/16 Bit.**

GETTING STARTED

If you have purchased a complete Wallbed Cabinet, then go directly to the Assembly and Installation section.

Start by cutting and edge-banding all the pieces shown on the ENDURA CUT LIST in the size and material of your choice. The dimensions on the cut list are the finished sizes. If you are using edge-banding thicker than normal tape edge-banding, then you'll need to compensate in your measurements. Solid wood is certainly okay to use but is not recommended for the door panels or verticals because of possible warping.

IMPORTANT

Please make sure you have the capability and tools required in order to be able to properly put the door panel sections together when building a full or queen (twin size can be 1 door panel). The door panels can be joined down the center or you can choose to leave a 1/8" reveal. If cutting yourself, you will want to make sure that the seam is perfect. You can also cover the seam with different mouldings for decoration.

Wallbeds Northwest
17646 NE 65th St.
Redmond, WA 98052

1-877-327-4543
www.wallbedsnw.com

ENDURA PARTS LIST

When you purchase an ENDURA WALL BED MECHANISM from Wallbeds Northwest, you will receive the parts listed below and the instructions that follow. If you purchase an ENDURA WALL BED MECHANISM and CABINET, then you will receive the parts listed below, instructions, the cabinet materials and the hardware to assemble it. You will still need the proper tools to assemble the wall bed.

PARTS LIST

1 RIGHT AND 1 LEFT SIDE ENDURA MECHANISM

8 - MECHANISM MOUNTING BOLTS



6 - MECHANISM MOUNTING WASHERS



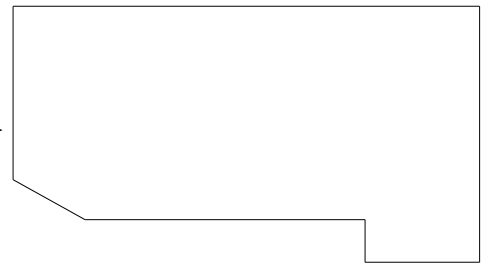
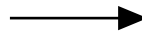
8 - MECHANISM MOUNTING NUTS



2 EXCENTRIC WASHERS



1 RIGHT AND 1 LEFT PLASTIC MECHANISM COVERS



4 PLASTIC COVER MOUNTING SCREWS



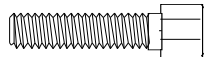
14 SPRINGS - TWIN

16 SPRINGS - FULL



18 SPRINGS - QUEEN

6 PLATFORM MOUNTING BOLTS



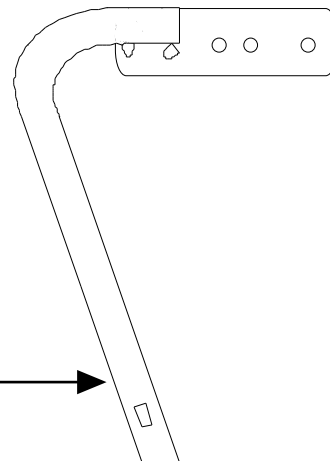
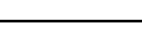
6 PLATFORM MOUNTING WASHERS



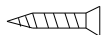
6 PLATFORM MOUNTING NUTS



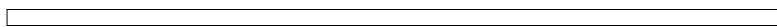
RIGHT AND LEFT SIDE LEGS



8 - LEG MOUNTING SCREWS



1 LEG CONNECTOR -WHITE ROD



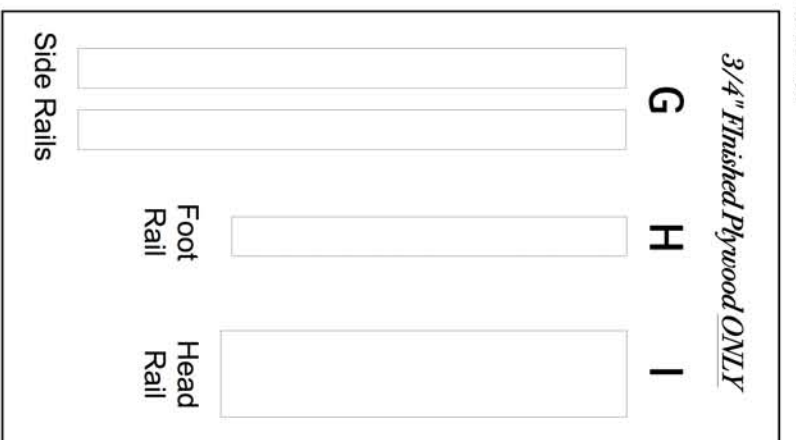
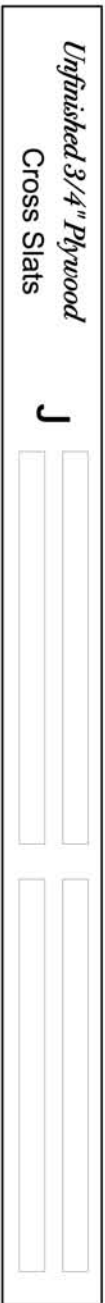
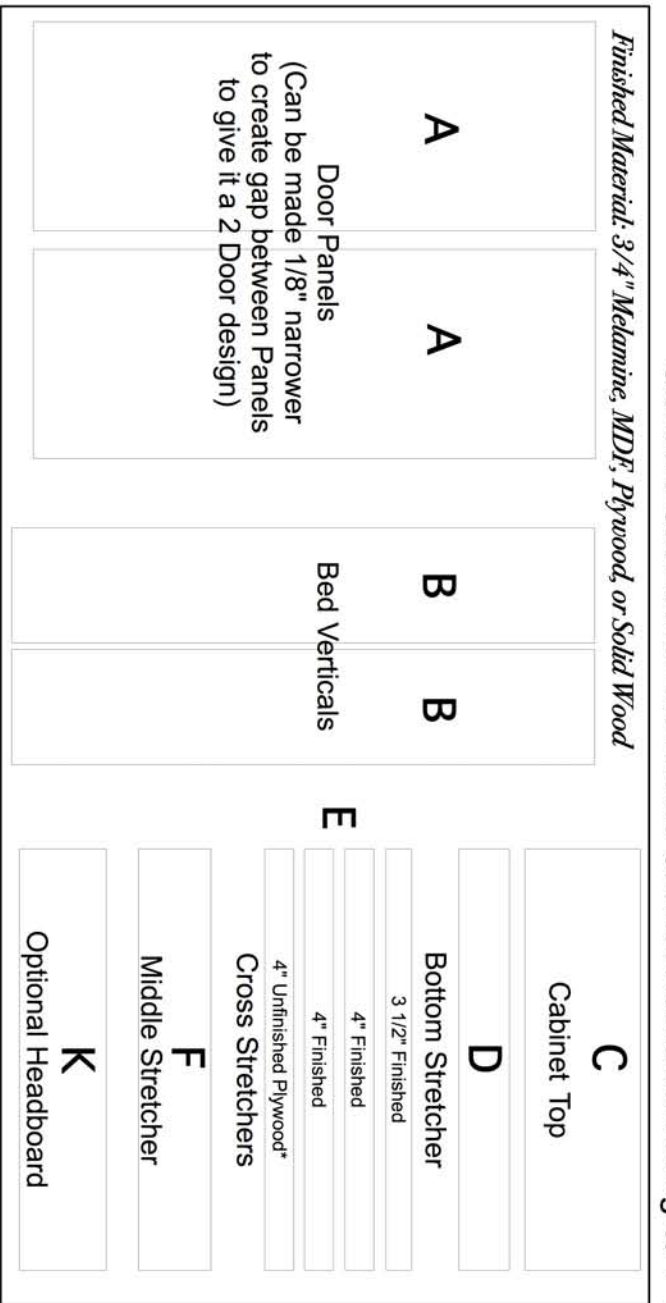
2 PLASTIC LEG CONNECTOR INSERTS



2 LEG CONNECTOR SCREWS



Standard Cut List for the Endura Cabinet Mechanism using 3/4" Material



NO. OF PIECES	#	DESCRIPTION	TWIN DIMENSIONS	FULL DIMENSIONS	QUEEN DIMENSIONS	MATERIAL	EDGE BANDING
1	A	Door Panel	43 X 77 3/4	29 X 77 3/4	32 X 82 3/4	3/4" FINISHED	2 SHORT / 2 LONG
2	A	Door Panels		16 X 80 7/8	16 X 85 7/8	3/4" FINISHED	2 SHORT/1 LONG
2	B	Verticals	16 X 80 7/8	16 X 80 7/8	16 X 85 7/8	3/4" FINISHED	1 LONG
1	C	Cabinet Top	16 X 43 3/8	16 X 58 3/8	16 X 64 3/8	3/4" FINISHED	1 LONG
1	D	Bottom Stretcher	7 X 43 3/8	7 X 58 3/8	7 X 64 3/8	3/4" FINISHED	1 LONG
3	E	Back Cross Stretchers	4 X 43 3/8	4 X 58 3/8	4 X 64 3/8	2 - Finished / *1 Unfinished	1 LONG
1	E	Top Front Cross Stretcher	3 1/2 X 43 3/8	3 1/2 X 58 3/8	3 1/2 X 64 3/8	3/4" FINISHED	2 LONG
1	F	Middle Stretcher - No Headboard	10 X 43 3/8	10 X 58 3/8	10 X 64 3/8	3/4" FINISHED	1 LONG
(1)	F	(Middle Stretcher if Headboard)	20 X 43 3/8	20 X 58 3/8	20 X 64 3/8	3/4" FINISHED	1 LONG
2	G	Bed Side Rails	5 1/2 X 75 3/4	5 1/2 X 75 3/4	5 1/2 X 80 3/4	3/4" PLYWOOD ONLY	2 SHORT / 1 LONG
1	H	Bed Foot Rail	5 1/2 X 39 5/8	5 1/2 X 54 5/8	5 1/2 X 60 5/8	3/4" PLYWOOD ONLY	1 LONG
1	I	Bed Head Rail	11 X 40 7/8	11 X 55 7/8	11 X 61 7/8	3/4" PLYWOOD ONLY	2 SHORT / 1 LONG
4	J	Slats	3 1/2 X 39 3/8	3 1/2 X 54 3/8	3 1/2 X 60 3/8	3/4" SCRAP PLYWOOD	3/4" PLYWOOD
1	K	Optional Headboard	11 X 41 1/8	11 X 56 1/8	11 X 62 1/8	3/4" FINISHED	2 SHORT / 2 LONG

* Unfinished Plywood Top Back Stretcher is included only with projects made of Melamine and/or Thermofoil

ASSEMBLED VIEW OF FULL ENDURA CABINET

For Melamine and/or Thermofoil Projects only;
 Please note the addition of an Unfinished Plywood Top Stretcher . This is for extra strength when attaching the Wallbed Cabinet to the Wall through the Top Back Stretcher. After attaching the Wallbed to the Wall use the Matching Finished Top Back Stretcher to cover it. Use screws, glue, or finishing nails.

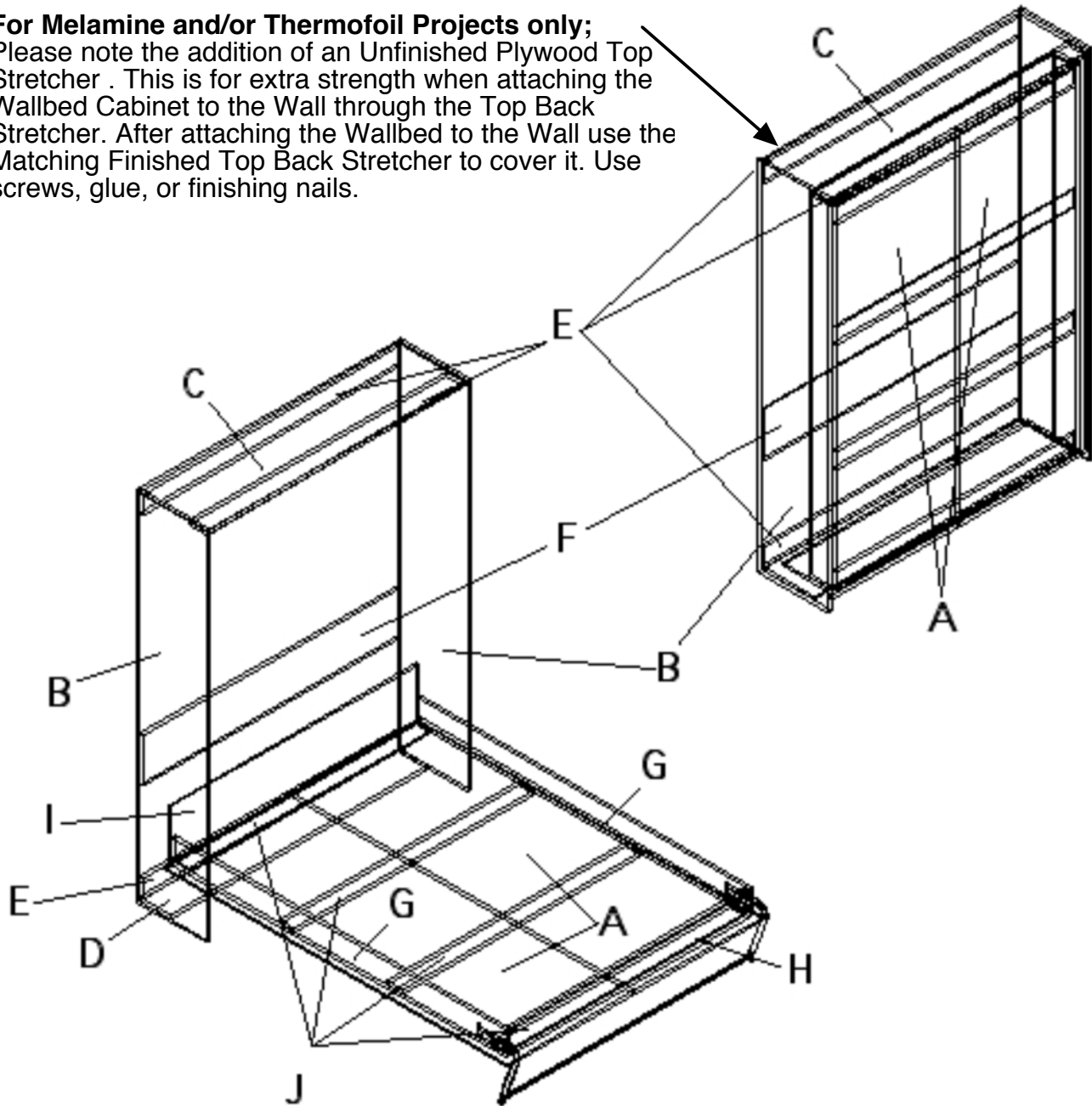
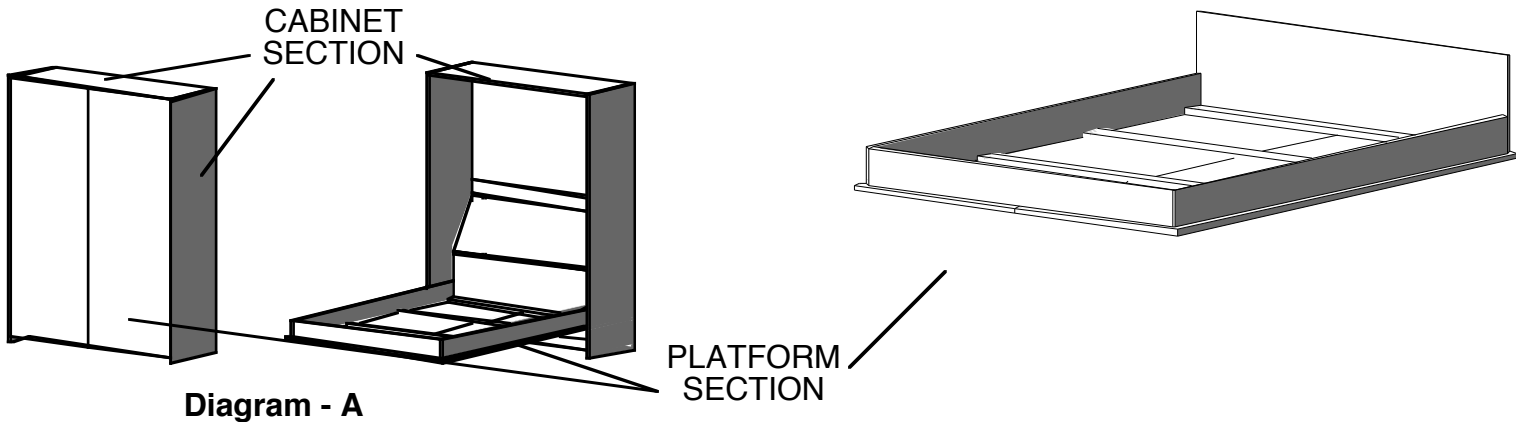


DIAGRAM 2

Dimensions	Width	Height	Depth	Open
Twin	44 7/8	80 7/8	16	86
Full	59 7/8	80 7/8	16	86
Queen	65 7/8	85 7/8	16	91

THE PLATFORM ASSEMBLY

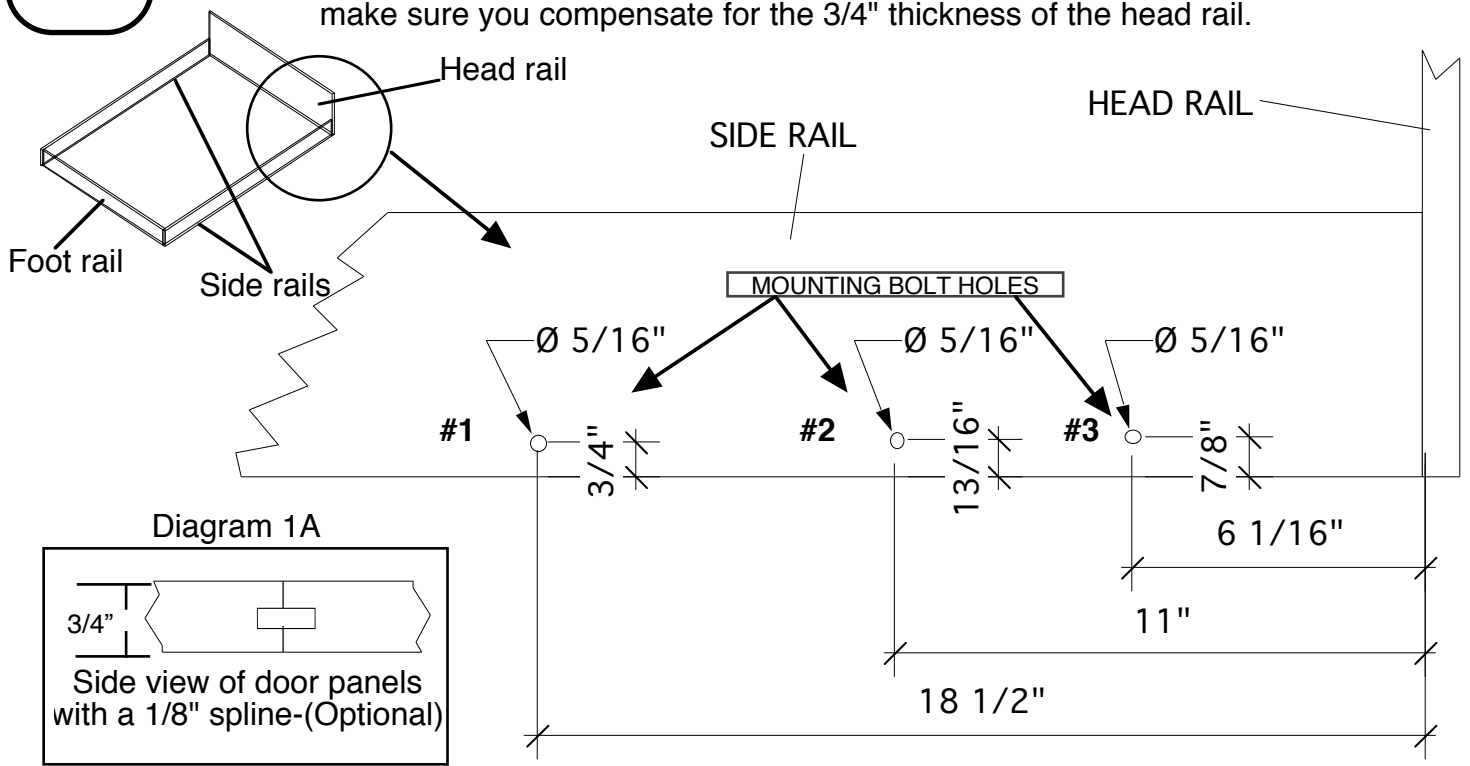
The platform is the part of the wall bed that holds the mattress and is pulled down from the wall. Start assembling the platform section. **The following example is for a full size bed.** Assembly for twin and queen is the same with the exception being that the twin uses one door panel.



#1

Pre-drill side rails with 5/16" bit as shown. (If you have a DIY Kit skip this step).

If the side rails are not pre-drilled and are drilled after assembling the head rail, make sure you compensate for the 3/4" thickness of the head rail.



#2

Lay the door panels on the carpet or a nonabrasive surface. Set the head, foot, side rails, and slats in their approximate positions. You will need approx. **30** - (2 1/2" or 3") "L" brackets, approx. **100** - 3/4" wood screws, **1** box - 1 1/4" wood screws and **8** - CONFIRMAT screws.

NOTE! TWIN SIZE MAY REQUIRE FEWER MATERIALS FOR SOME ITEMS.

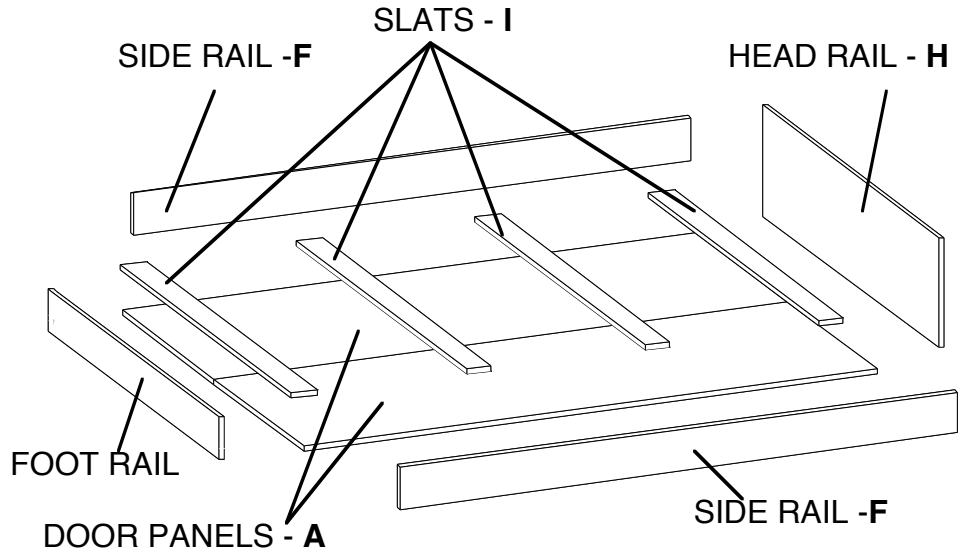
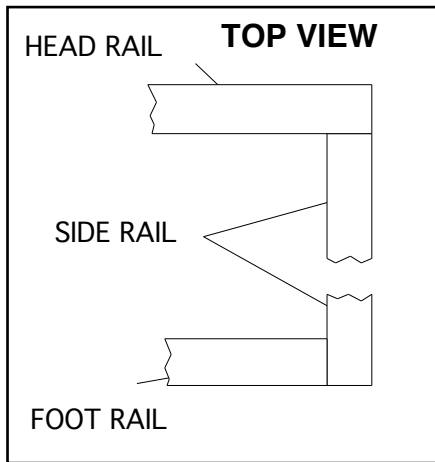
Caution! Be careful not to drill through the face of the Door Panels - especially when using Rigid Thermofoil Door Panels

#3

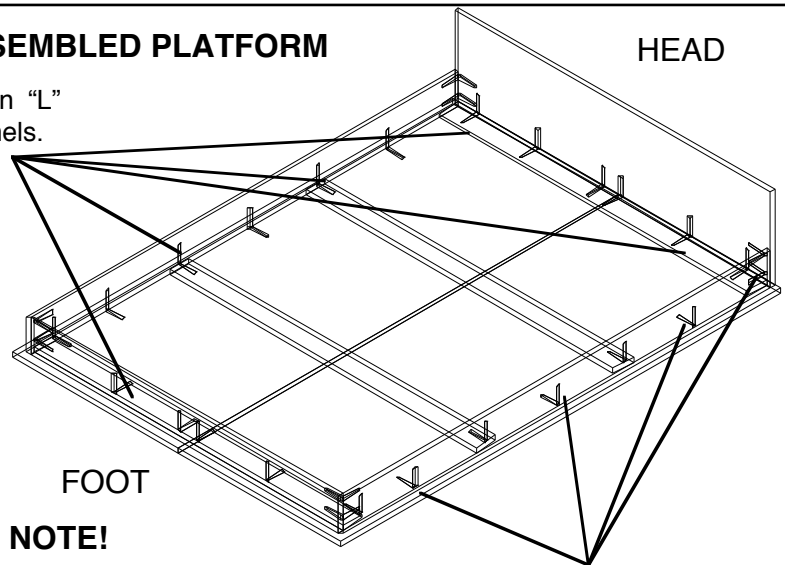
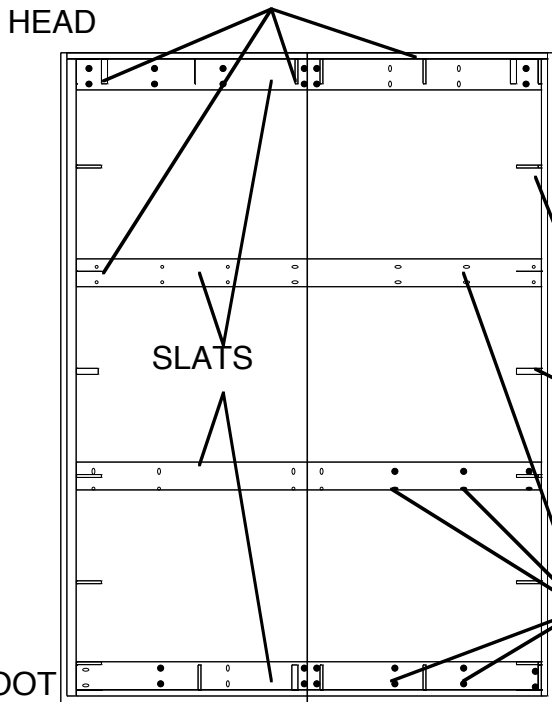
Assemble the head rail and the foot rail to the side rails (rail assembly) with 2 CONFIRMAT screws on each corner. The side rail ends butt up to the head rail and the foot rail butts up to the side rails. See diagram 4A. Use 1/2" inch wood screws to fasten one (or two) "L" brackets to reinforce each corner. If you have purchased a DIY Kit bed, then you will need to drill a 3/16" pilot hole into all the end panels as the confirmat screws are not self-tapping.

#4

Set the slats horizontally as shown with one butted to the head rail and one butted to the foot rail with the other two evenly spaced. Attach the "rail" assembly to the slats with the "L" brackets as shown. Attach the "rail" assembly and slats to the door panels with the "L" brackets as shown. The head rail sits flush with the edge of the door panels and the side rails should be centered with the door panels. There should be a 1 1/16" lip on each side. Use 1 1/4" wood screws where the "L" brackets sit on top of the slats and use only 1/2" wood screws when mounting "L" brackets directly into the door panel. **CAUTION!! If you are using Rigid Thermfoil Door Panels you must be careful not to drill through the recessed areas of the doors. Measure the front of the panels and note where it is recessed and do not put screws in that area. (See note below).**

Caution!**DIAGRAM - 4A****VIEW OF ASSEMBLED PLATFORM**

Use 1 1/4" wood screws when screwing in "L" brackets through slats and into the door panels.

**NOTE!**

"L" Bracket placements using 1/2" wood screws. Use only 1/2" screws on all corners when screwing head, side and foot rails together. **Caution!!! If you are using Rigid Thermfoil Doors, do not put screws into both holes of the "L" Bracket when attaching Door Panel Faces. Usually the hole closest to the side rail should not be used. It is best to measure the face to determine which holes to avoid.**

Use only 1 1/4" wood screws when screwing in the slats to the door panels. Make sure to place screws through slats into bed face as shown.

THE CABINET ASSEMBLY

The cabinet assembly is the section that is attached to the wall and is what the platform folds into.

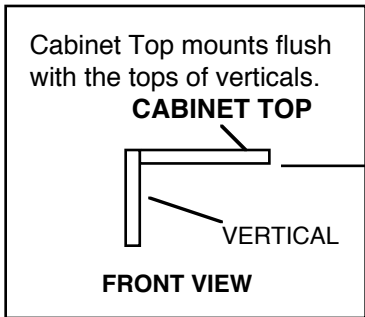
Note: If you have purchased a "Complete Wallbed" then some of the connectors will be changed to a Rafx Connector (see below).

#1

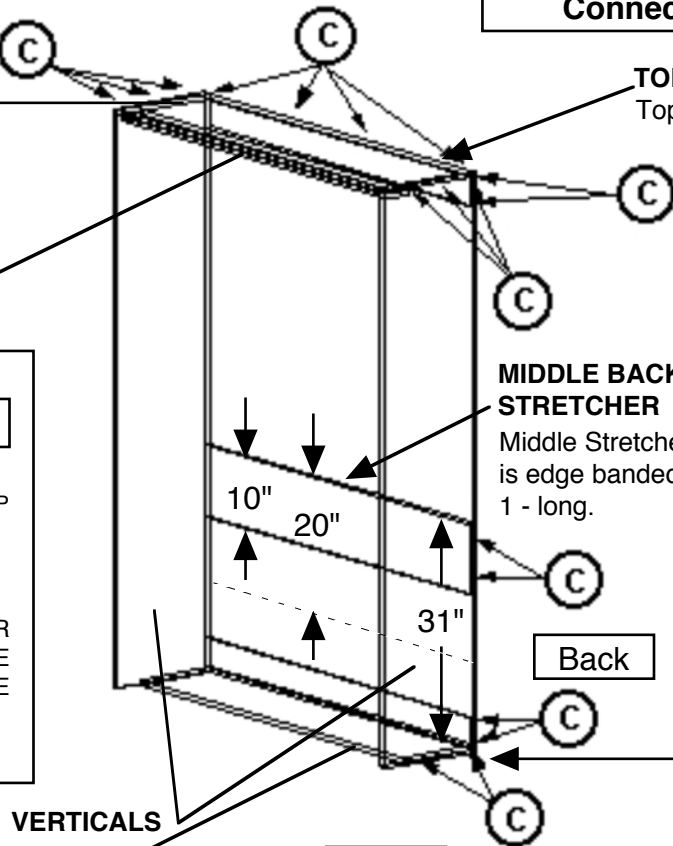
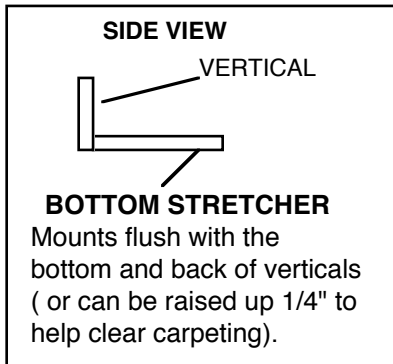
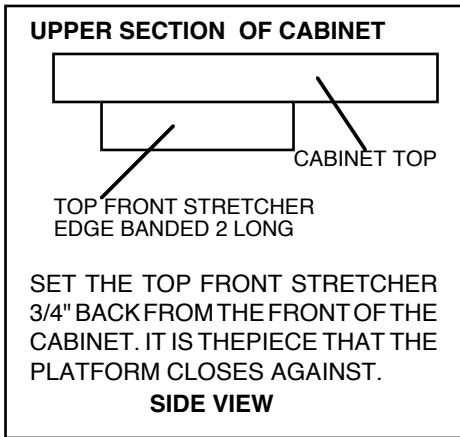
Assemble the cabinet face down on the floor. Attach the CABINET TOP and the BOTTOM STRETCHER to the VERTICALS with confirmat screws. Confirmat screws are recommended, but can be substituted with "L" brackets and/or wood screws. The Stretchers are mounted in between the verticals as shown below. The Top Front Stretcher should be mounted with 1 1/4" screws from the top of the Cabinet Top rather than confirmats from the sides of the Verticals. When using confirmat screws, you should drill pilot holes through the verticals and into the stretchers and then screw in the confirmats. The CONFIRMAT screws accept plastic plugs in many matching colors. See your local hardware dealer for information on this. If using "L" brackets, then put as many on as necessary - all corners and every 24" to 36". Tilt the cabinet upright and position it against the wall.

ENDURA CABINET

(C) CONFIRMAT screws should be placed in these locations. (Kit Beds may substitute Rafx Connectors in some areas).



TOP FRONT STRETCHER



TOP BACK STRETCHER
Top is edge banded 1 - long.

All back stretchers are mounted flush with the back and between the verticals. Mount the Unfinished Plywood Top Back Stretcher to the Cabinet Top. After installing the cabinet to the wall, cover the Unfinished Plywood Stretcher with the matching finished one. Mount the Middle Back Stretcher 31" from the floor. If you have ordered the unit with a Sloping Headboard the Middle Stretcher will be 20" instead of 10". Mount the Bottom Back Stretcher on top of the Bottom Stretcher.

MIDDLE BACK STRETCHER
Middle Stretcher is edge banded 1 - long.

BOTTOM BACK STRETCHER
Bottom is edge banded 1 - Long

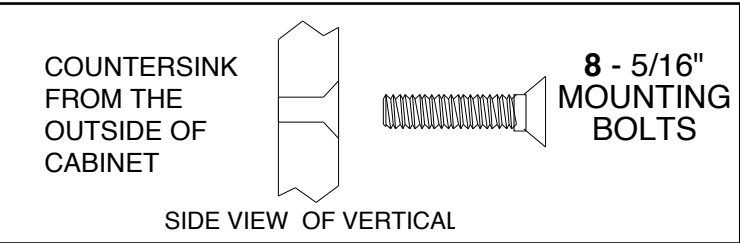
You will need to Pre-Drill 3/16" Dia. x 1 1/2" Deep Pilot Hole on all pieces requiring Confirmat Screws; Cabinet Top, Bottom Stretcher, Side Rails, & Foot Rail.



Rafx Connector Parts come with purchase of complete wallbed units

#2

Drill 4 holes in each Vertical with a 5/16th inch bit as diagramed below. Countersink each hole from the outside of the cabinet to accommodate the bolts that hold the Endura mechanism.
NOTE! If you have a DIY Kit then skip this step



#3

Mount each side of the ENDURA WALL BED mechanism to the verticals as shown in DIAGRAM 3A. Use 4 of the

5/16" mounting bolts, 3 regular washers, 4 nuts and 1 excentric washer to mount each side of the ENDURA MECHANISM. Set both excentric washers in the halfway position and tighten. Mount 5 to 9 springs on each side of the mechanism as shown in DIAGRAM 3A depending on the weight of the material, mattress and the size of bed.

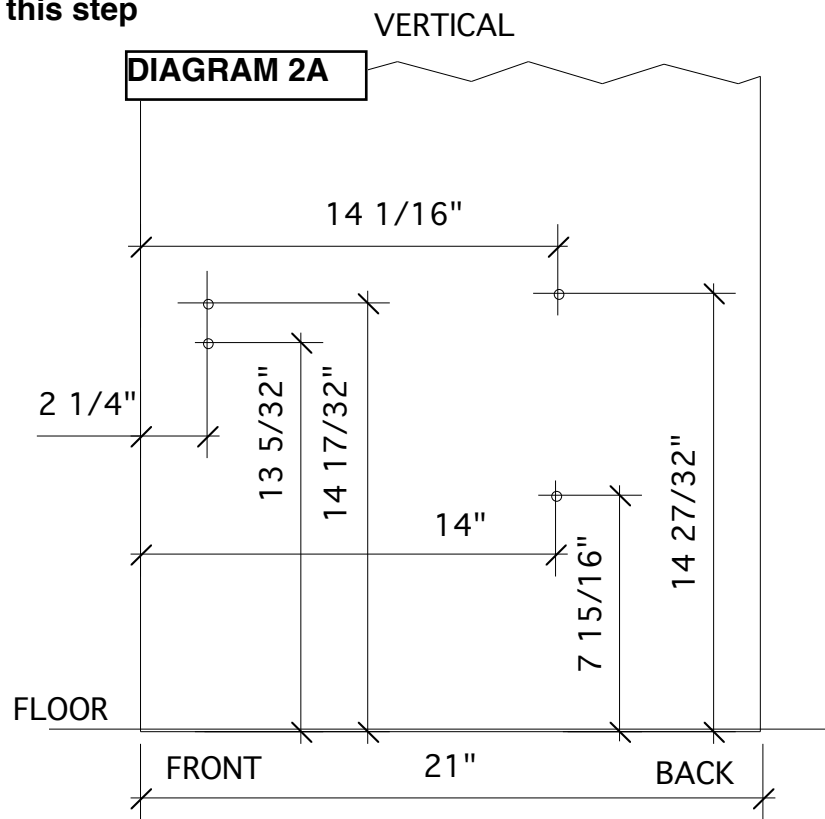
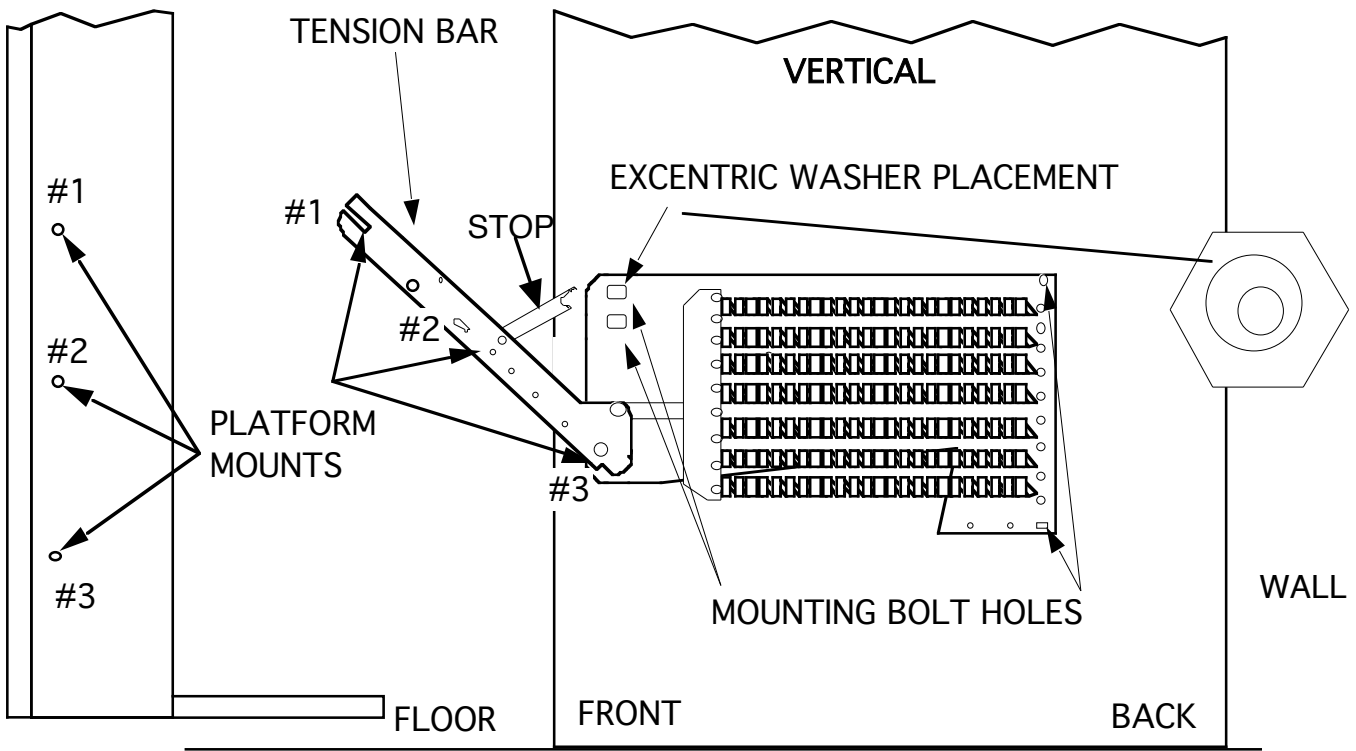


DIAGRAM 3A

PLATFORM SIDE VIEW



INSTALLING PLATFORM TO CABINET

#1

Position the cabinet against the wall where it is to be mounted. Make sure that it is square. Locate all the studs that are behind the cabinet. Mount the cabinet to the studs in the wall with heavy duty 4" wood screws. **IMPORTANT! DO NOT MOUNT A WALL BED INTO DRY WALL ONLY.** It must be securely fastened into studs. They must be mounted either through the Top Back Stretcher or use "L" brackets on top of the Top Stretcher or do both. Two screws should be put into each stud through the Top Back Stretcher or "L" brackets. A twin should be screwed into no less than two studs, full and queen should be three studs or more.

#2

Attach the appropriate amount of springs to each side of the mechanism. Twins usually require 4 to 6 each side, fulls require 5 to 7 and queens require 6 to 8 all depending on the weight of the material you are using and the weight of the mattress.

#3

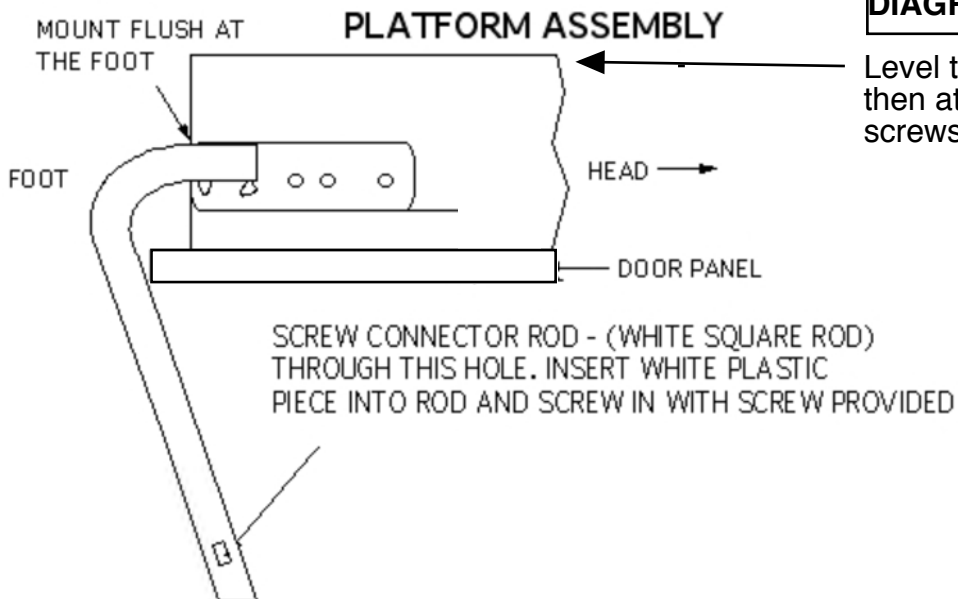
Pull out each Tension Arm and attach the **stop** to the upper mounting bolt (with excentric washer). An extension pipe will make it easier to pull down. Attach the #1 and #3 (not #2) mounting bolts to the Platform. Put the bolt through on the outside of the side rail and use 2 washers and a nut to secure it into place. Do not tighten. Leave at least 1/8" of an inch protruding on the outside of the side rail.

#4

With at least two people, lower the Platform into the cabinet by inserting the #1 bolt into the slot at the end of the Tension Arm. See Diagram 3A. The #3 bolts will position themselves as the platform is tilted to approximately 60 degrees. While one person holds the platform in position, the other person should attach the #2 mounting bolts and tighten all 6 of the mounting bolts. The Wall Bed is now secure.

#5

Attach the legs and leg connector to the foot of the platform with the screws provided as shown in Diagram 7A. Bolts may be substituted for the screws. Level the platform and attach the leg assembly.



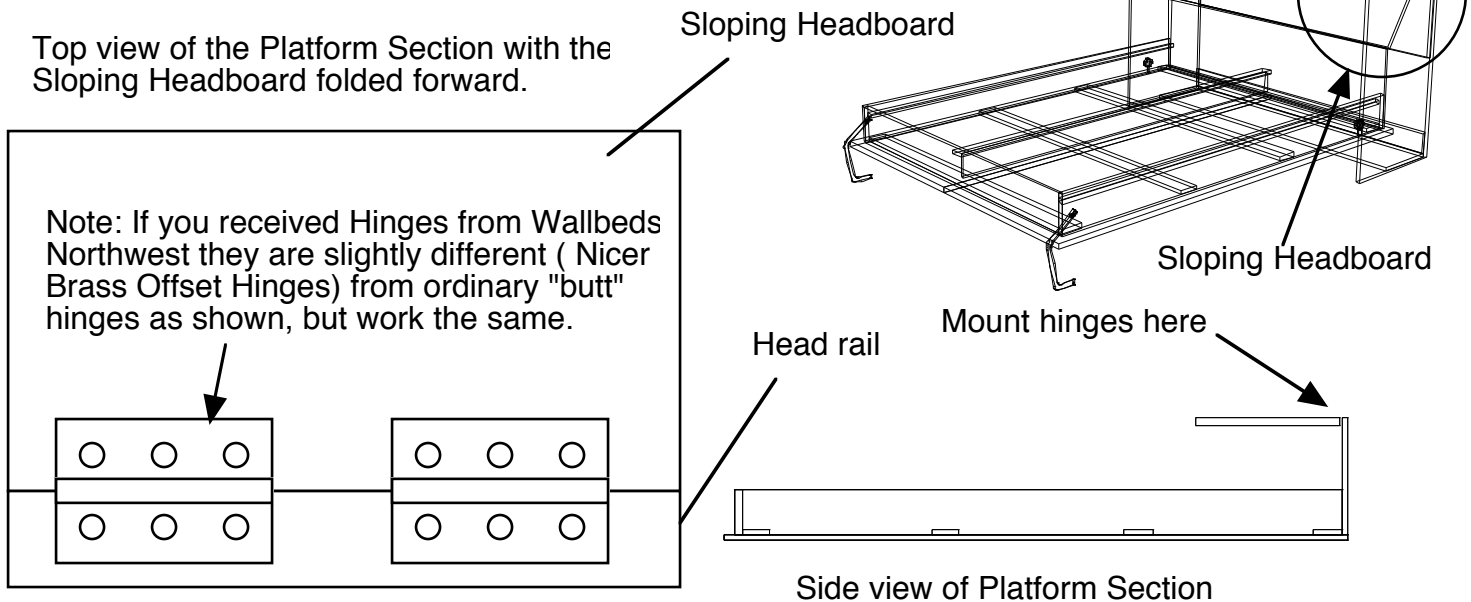
#6

Mount the right and left plastic covers over the mechanism with the 2 screws provided. Congratulations! Your Wall bed is ready to use. If you have any questions, Please contact your salesperson and we will be happy to assist you in any way that we can. Thank you!

Optional Sloping Headboard

#1

The Sliding Headboard is mounted to the fixed Head rail on the platform section with butt hinges. 4 hinges are recommended. Mount the hinges so that one side is on the back bottom side of the Sliding Headboard and the other side on the top of the Head rail. See diagram below.



TIPS

1. If you are building side cabinets to go next to the Wall Bed, you can choose to eliminate the 2 Verticals from the cut list. Use the sides of your cabinets as the verticals and the Middle Stretcher is not necessary unless you are using the Optional Sloping Headboard. Note that the sides of the cabinets need to be the same dimensions as the normal Verticals.

If you have any questions, please contact us at Wallbeds Northwest Inc.

Phone (425) 284-6692 Fax (425) 284-6695

17646 NE 65th St • Redmond, WA 98052