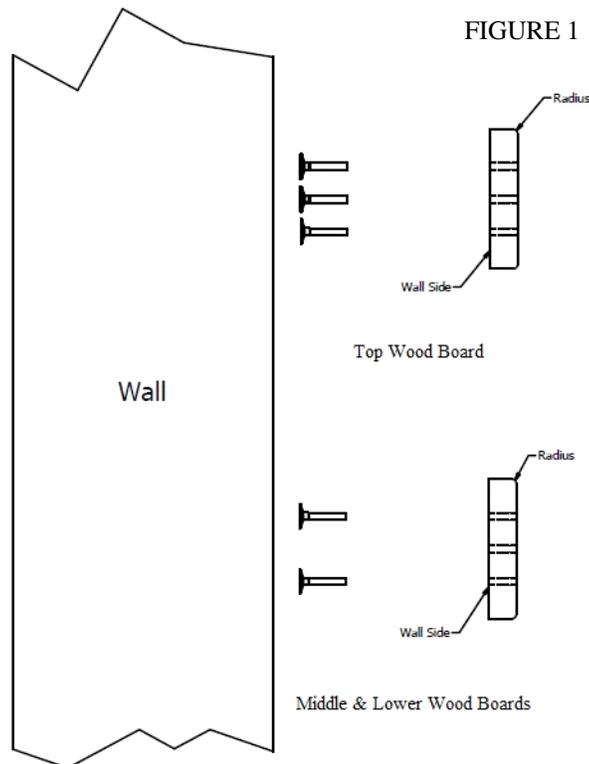


## SWINGUP STRUCTURE

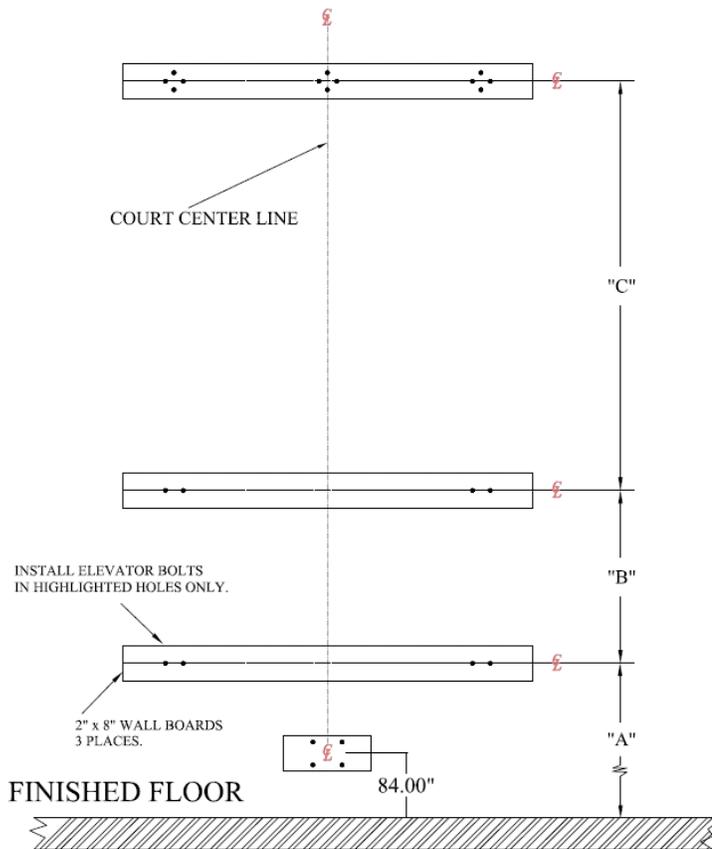
### CAUTION !!!

Wall mount structures require a minimum ceiling and wall height as well as an acceptable wall mounting surface. Brick, block, or poured concrete walls are superior. It is inadvisable to mount structures to walls with wood or steel studs unless additional work approved by an engineer is done to provide additional support. Bison does not provide wall anchors with any structure. The purchaser assumes liability for the installation of any wall mounting structure. Consult a professional architect, engineer, or contractor to determine safe methods of installation to your facility's wall construction.

- ◆ Inspect all contents prior to installation. Report any missing parts to dealer immediately.
  - ◆ Read all instructions before proceeding.
1. Using the Wall Board Layout Diagram determine which pre-drilled holes to use on the Wall Boards. Using a hammer, install the Flanged Elevator Bolts into the back of each wall board in the appropriate holes and seat with a hammer. See Figures 1 and 2.



WALL BOARD LAYOUT DIAGRAM

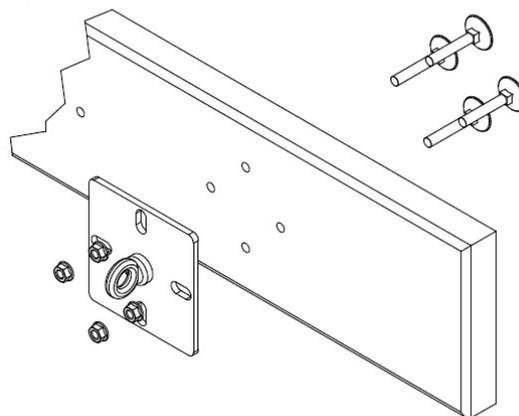


**NOTE !!!**  
Dimension "C" is shown on the installation prints packed with the backstop hardware.

Backboard Models	Dimension "B"
BA42XL	35 1/2" +/-1/4"
BA495	20" +/-1/4"
Backboard Models	DIM "A" FROM FINISHED FLOOR
BA42XL	9' 9 1/2" +/-1/4"
BA495	10' 2" +/-1/4"

2. Mount the IPB450 Chain Mount Plate at the top Wall Board, at both chain locations, using 3/8" serrated flange nuts. Mount an IPB450 Chain Mount Plate at the center set of holes on the top wall board for the attachment of the IPB1390 Pulley. See Figure 2.  
This wall board assembly will be mounted in the top position on the wall.

FIGURE 2



**NOTE !!!**  
Be sure that all brackets are oriented according to the illustrations provided.

3. Mark the center line of the court on the wall. Fasten the three wall boards to the wall at the heights indicated on the enclosed prints and centered with the center line of the court, as shown on the wall board layout diagram. Mount the BA925 Manual Structure Winch centered on the backstop, approx. 7'-0" above the floor line. Drill holes in the wall board in no less than four places. If the wall is masonry (brick over block), block, or poured concrete **and** it is possible to drill through the wall **and** have access to the other side of the wall, it is strongly recommended that the installer bolt through the entire wall using 1/2" bolts.

**Note!!!**

All assembly materials are supplied except hardware to attach the wall boards to the customer's wall. Attachment method and type of anchor used are the responsibility of the installer.

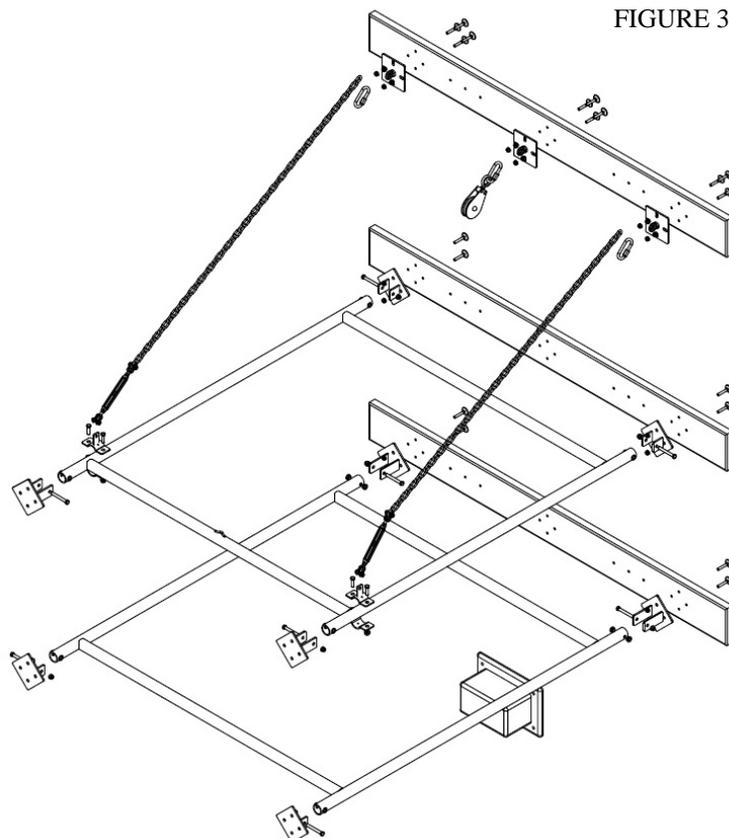
**Warning!!!**

Severe injury to players or fans may result from failure to select a proper anchoring system given the construction and condition of the wall or the proper use of the anchoring system.

**Note!!!**

Bison model **BA955** Safe-Lok Structure Catch is recommended; especially for systems installed over bleachers.

4. Attach the IPB1390 pulley to the center IPB450 mounting plate using IPPC204 repair link. See Figure 3.



5. Attach the Grade 40 #7 Proof-Coil chain to each chain bracket using an IPPC204 repair link. See Figure 3.
6. Attach the IPB1340 (2 1/4") pivot bracket to each chain bracket using 3/8" serrated flange nuts. Attach the IPB1360 (4 1/4") pivot bracket to the bottom wall board using 3/8" serrated flange nuts. See Figure 3.
7. Insert an IPPC105 bronze flanged bushing into each side of the hole in the extension pipe frame on the end at the wall board. See Figure 4. Attach the extension pipe frame to each IPB1340 pivot bracket. Repeat procedure to attach the lower extension pipe frame to the IPB1360 pivot brackets. You will need to support the extension pipe frames until stem #8 is completed.

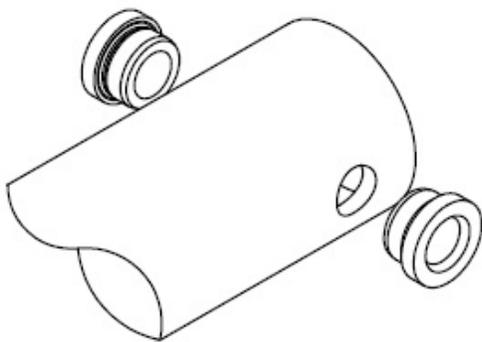


FIGURE 4

8. Attach an IPB1370 connector bracket to each chain with a turnbuckle. Attach the IPB1370 connector bracket to the top extension pipe frame
9. Attach the IPB1360 (4 1/4") pivot brackets to the top extension pipe frame. These pipes will have an IPB1340 (2 1/4") pivot bracket installed on the back-board end. Attach the IPB1340 (2 1/4") pivot brackets to the bottom extension pipe frame. These pipes will have an IPB1360 (4 1/4") pivot bracket installed on the wall board end. See Figure
10. Attach the telescoping brace below the IPB1360 pivot bracket on the bottom extension pipe using a 7/16"x5" machine bolt. See Figure 5A and Figure 5B.
11. Tighten the chains by adjusting the turnbuckles, as required, until there is no slack in the chains. Do not remove the excess chain until backstop installation is complete. See instruction step #16 and Figure 3.
12. Attach the 1/4" galvanized aircraft cable to the welded loop on the top extension pipe frame using 2 cable clamps. Run cable through the IPB1390 pulley and down to the BA925 manual structure winch. Attach the aircraft cable to the winch drum using the instructions provided with the winch. Crank the extra cable into the winch to remove slack. See Figure 3.

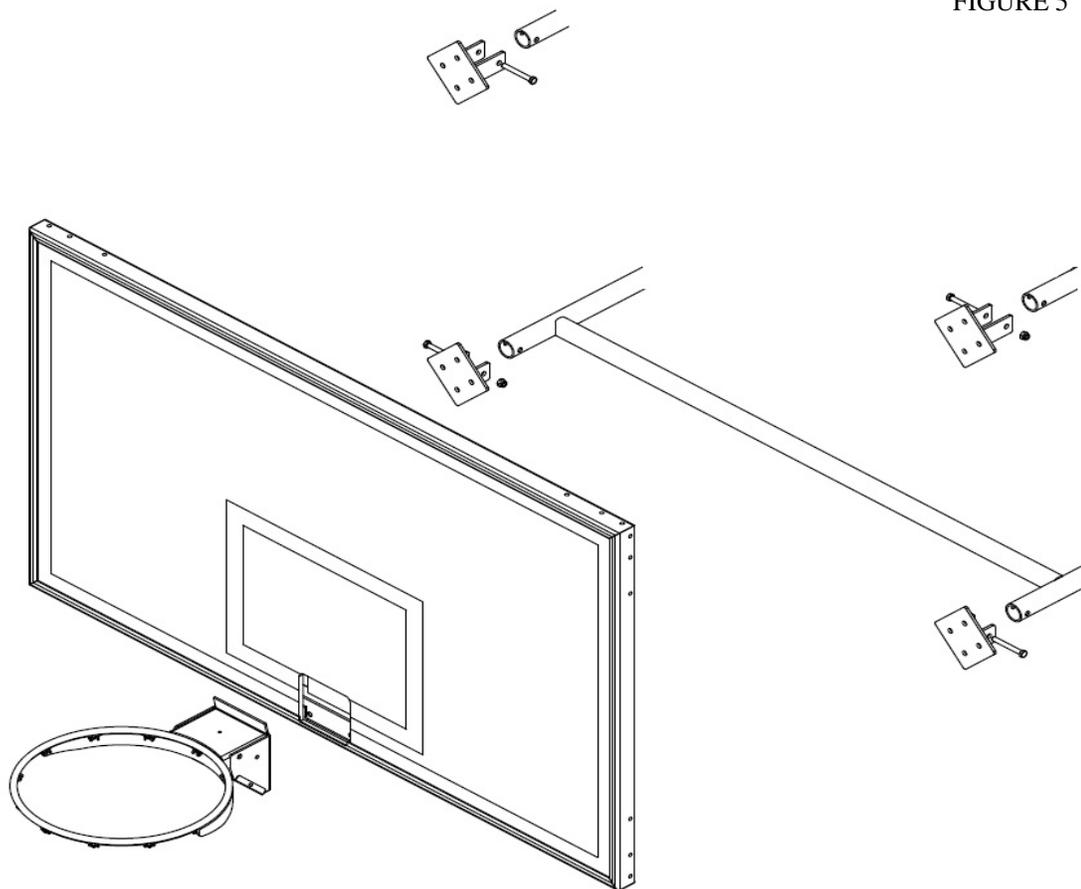
**NOTE:** Mount height adjuster at this time if applicable using instructions provided with the height adjuster.

**Warning!!!**

Failure to have all hinges in the same plane will create stress on the backboard and may result in breakage of glass backboards before, during, or after play begins. Follow the instructions provided with the backboard to reduce stress on the glass.

13. If this backstop is to include a BA980 10' to 8' Rim Height Adjuster, install at this time using the installation instructions provided with the height adjuster. If height adjuster is not required, please proceed to the next step.
14. Mount the backboard to the structure. If you are installing a rectangular glass backboard, the attachment hardware is packed with the backboard, for all other backboards, the attachment hardware will be packed with the backstop frame hardware. Be sure to level the backboard. See figure 6.

FIGURE 5



15. Mount the rim and net insuring that the rim is 10' above the playing surface and level.
16. Check to insure all bolts are tight. When all steps to this point are complete, remove any excess chain with a bolt cutter or hacksaw.
17. Install backboard padding, if applicable.
18. Do not allow play until you are confident that the structure is securely mounted to the wall. The structure must be capable of supporting 1000 lbs. to be considered safe for play.

**NOTE!!!**  
**WALL MOUNTED STRUCTURES SHOULD BE CHECKED**  
**YEARLY FOR LOOSE BOLTS OR ANCHORS.**