Instruction Manual -

IN Stock ST48U



Customer Service (800) 247-7668

4'- 8' Fan & Rectangle

Item	Qty	Description	Item	Qty	Description
А	4	Extension Assembly	В	3	Wall Boards (Rect. 84" Long)
С	2	Chain Eye Bracket	D	4	3/16" Proof Chain (130" long)
Е	12	3/8" x 2 1/2" Flange Elevator Bolt	F	16	3/8" Hex Nut
G	20	3/8" Flat Washer	Н	16	3/8" Lock Washer
Ι	4	3/8" x 2 1/2" Hex Bolt	J	4	Saddle Clamp Half
К	1	1/4" Allen Wrench	L	8	7/16" x 1 1/2" Carriage Bolt
М	8	7/16" Flat Washer	Ν	8	7/16" Lock Washer
0	8	7/16" Hex Nut	Р	4	Turnbuckle
Q	4	Chain Connector	R	2	Chain Connector Bracket
S	2	5/16" Eye Bolt	Т	2	5/16" Locking Nut

- Inspect all contents prior to installation. Report any missing parts to dealer immediately.
- Read all instructions before proceeding.

CAUTION !!!

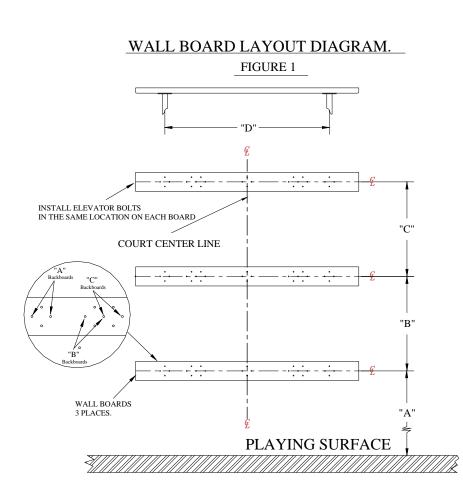
Wall mount structures require a minimum ceiling and wall height as well as an acceptable wall mounting surface. Brick, block, or poured concrete walls are superior. It is inadvisable to mount structures to walls with wood or steel studs unless additional work approved by an engineer is done to provide 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.

Note!!!

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

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Using the Wall Board Layout Diagram determine the appropriate pre-drilled holes on the *Wall Board* (B).Using a hammer, install the *3/8" x 2 1/2" Flanged Elevator Bolts* (E) into the back of each *Wall Board* (B) in the appropriate holes. See Figures 1 and 2.



	E FIGURE 2 MIDDLE & BOTTOM BOARDS
	INSTALL 4 FLANGED ELEVATOR BOLTS THROUGH THE BACK OF EACH WALL BOARD. SEAT WITH HAMMER.
	Radius
Wall	
	b
	Wall Side

Mount Holes	Bison Backboard Models	DIM "A" FROM PLAYING SURFACE
"А"	BA42XL	9' 9 1/2" +/-1/4"
"C"	BA495, BA47, BA407C, BA44XL, BA465	10' 2" +/-1/4"
"A"	BA42E, BA472, BA455	9' 9 1/8" +/-1/4"
"А"	BA48, BA48XL	9' 3'' +/-1/4''
"В"	BA407G	9' 9 1/2" +/-1/4"
"С"	BA485	10' 1 3/4" +/-1/4"

Bison Backboard	Dimension "B"
BA42XL, BA407G	35 1/2" +/-1/4"
BA495, BA47, BA485, BA407C, BA44XL, BA465	20" +/-1/4"
BA42E, BA472, BA455	36" +/-1/4"
BA48, BA48XL	42" +/-1/4"

NOTE !!!

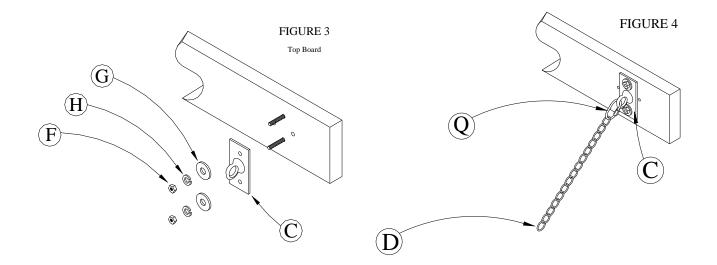
Dimension "C" is determined by the distance from the backboard to the wall. **Example**: If the backboard is 6' from the wall then dimension "C" = 6'.

Center to Center Distance For Extension Assemblies	Dimension "D"
"A"	62"
"В"	42"
"С"	35"

- 2. Mount *Chain Eye Brackets* (C) to the top *Wall Board* (B) using 3/8" *Flat Washers* (G), 3/8" *Lock Washers* (H), and 3/8" *Hex Nuts* (F). This wall board assembly will be mounted in the top position on the wall. See Figure 3.
- 3. Mark the center line of the court on the wall. Fasten the three *Wall Boards* (B) to the wall at the heights indicated on the chart and centered with the center line of the court. See Wall Board Layout Diagram. Drill holes in *Wall Boards* (B) according to position and type of wall anchor chosen. Anchor each wall board in no less then four places. If the wall is masonry, block, or poured concrete and it's possible to drill through the wall with access to the other side, it is strongly recommended that the installer bolts through the wall using 1/2" bolts.

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 improper use of the proper anchoring system.

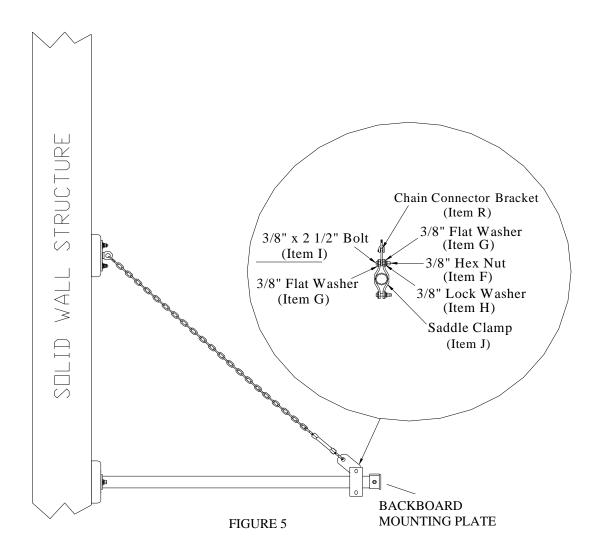
Note!!! Bison model **BA955** -Safe-Lok Structure Catch is strongly recommended for systems installed over bleachers.



4. Attach a *Chain Connector* (Q) and a *3/16" Proof Chain* (D) to each *Chain Eye Bracket* (C). See Figure 4.

5. Attach *Extension Assemblies* (A) to the middle *Wall Board* (B) using 3/8" *Hex Nuts* (F), 3/8" *Flat Washers* (G), and 3/8" *Lock Washers* (H). You may need to support the *Extension Assemblies* (A) until step # 9 is complete. Do not tighten the hex socket set screws. These will be tightened in a later step. If you desire a different extension length and/or use the **BA980 Height Adjuster** refer to the table for shortened frame tube lengths. You will have to redrill and reattach the mount to the frame tube after you have shortened the tube to the desired length. See Figures 5 and 6.

Desired Extension	Tube length with BA980 height adjuster	Tube length without BA980 height adjuster
48"	39"	43 1/2"
60"	51"	55 1/2"
72"	63"	67 1/2"
84"	75"	79 1/2"
96"	87"	Stock



- 6. Mount the four *Saddle Clamp Halves* (J) to the backboard side of the *Extension Assembly* (A) using 3/8" x 2 1/2" Hex Bolts (I), 3/8" Flat Washers (G), 3/8" Lock Washers (H), and 3/8" Hex Nuts (F). Attach a *Chain Connector Bracket* (R) between each set of *Saddle Clamps Halves* (J). Using the hardware provided with the *Turnbuckle* (P), attach a *Turnbuckle* (P) to each 3/16" Proof Chain (D) and then attach each *Turnbuckle* (P) to each *Chain Connector Bracket* (R). Using a *Chain Connector* (Q) attach each 3/16" Proof Chain (D) to each *Chain Eye Bracket* (C) on the top Wall Board (B). Using a level on the *Extension Assembly* (A) adjust the 3/16" Proof Chains (D) with the *Turnbuckles* (P) until the extensions are level. **Do not remove excess chain until the assembly is complete.** See Figure 4, 5, and 6.
- 7. Attach the lower *Extension Assemblies* (A) to the lower *Wall Board* (B) with the sway tab positioned to the inside as outlined in step # 5. You may need to support these *Extension Assemblies* (A) until the backboard is attached.
- 8. The *Extension Assemblies* (A) should all extend the same distance from the wall to the face of the backboard.

Warning!!! Failure to have all mounting plates in the same plane will create stress on the backboard and may result in breakage of glass backboards before, during, or after play begins.

- 9. Mount the backboard to the structure. In most cases the 7/16" *Hardware* (Items L-O) is required. Some backboards might require hardware not provided with this unit. Make sure the backboard is level.
- 10. When you are confident that the board is level, the proper distance from the wall, and there is no stress on the backboard due to misalignment, tighten all bolts and set screws using *1/4*" Allen Wrench (K) provided.
- 11. Mount the rim and net insuring that the rim is 10' from the playing surface and level.
- 12. Check to insure that all bolts are tight. When all the steps are complete, remove excess chain using a bolt cutter or hacksaw.
- 13. Attach a *Turnbuckle* (P), 3/16" Proof Chain (D), Chain Connector (Q), 3/16" Proof Chain (D), to the Eye Bolt (S) on the backboard mount plate, stringing it diagonally across to the opposite Extension Assembly (A) and attach to the welded sway tab on the extension assembly near the Wall Boards (A) using a Chain Connector (Q). Repeat the process forming an X. Tighten the Turnbuckles (P) to take up the sway. See Figures 5 and 6.
- 14. Install backboard padding if applicable.
- 15. Do not allow play until you are confident 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.

