



Rack and Rig Anchoring Guidelines

Johnson Health Tech mandates that all XULT equipment be secured to the floor for Free Standing Rig units and to the floor and wall for Wall Mounted Rig units. It is recommended that all Xult Rack and storage units be secured to the floor.

Securing the equipment to the floor is REQUIRED for any STRENGTH EQUIPMENT that will be used with body weight strap training equipment, chains, ropes, or elastic bands, or that will be externally loaded in a way not intended by the manufacturer.

REQUIREMENTS FOR ANCHORING XULT EXERCISE EQUIPMENT

ALL FLOORING

- Each anchoring fastener must withstand 3.3 kN (750 LBS) pull-out force from the floor.
- Anchor the exercise equipment at all provided locations.
- Do not reuse anchoring fasteners. Anchoring fasteners are intended for one time usage only.
- Understand where all bolt-down points are located on the exercise equipment and mark the locations prior to drilling holes into the floor.
- When calculating the required overall length of the anchoring fastener to ensure proper embedded depth into concrete flooring, be sure to account for the thickness of the bolt down foot (16.5 mm or approximately 0.65"), the thickness of any sub-flooring, and the thickness of any carpeting or rubber flooring.

CONCRETE

- Concrete anchoring fasteners must have a minimum of 64 mm (2.5") embedded depth into concrete flooring to ensure maximum security and pull out force.
- To ensure that debris does not block the entry of the anchor, drill hole depth an additional 13 mm (1/2") beyond the fastener length being used, and blow out any debris prior to installing concrete anchoring fastener.

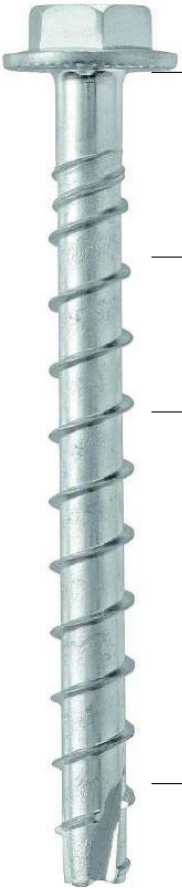
WOOD/TILE/RUBBER OVER CONCRETE SUB-FLOOR

- Understand the thickness of the flooring material. Add this height to the overall length of the anchoring fastener when selecting fastener length to ensure proper embedded depth into concrete flooring. The concrete anchoring fastener must have a minimum of 64 mm (2.5") embedded depth into concrete flooring to ensure maximum security and pull-out force.

WALL MOUNTING – CONCRETE OR WOOD STUDS

- Each anchoring fastener must withstand 2.2 kN (500 LBS) pull-out force from the wall.
- Anchor the exercise equipment at all provided wall locations.
- When calculating the required overall length of the anchoring fastener to ensure proper embedded depth into the wall, be sure to account for the thickness of the mounting plate (0.25" or approx. 6.5 mm), the thickness of any mounting hardware used to span between wall studs (such as Unistrut), and the thickness of the dry wall/sheet rock.

Manufacture recommends anchoring the XULT exercise equipment with Hilti-brand concrete anchor fasteners. Regardless of the fastener used, each anchoring fastener must withstand a minimum pull-out force of 3.3 kN (750 LBS) from the floor, and a minimum pull-out force of 2.2 kN (500 LBS) from the walls.



Concrete Anchor – Floor Engagement Standard For use with Manufacture’s recommended Hilti-brand concrete anchor fasteners		
16.5 mm (typical) (0.65")	Foot Thickness	This part of the fastener is not engaged with the concrete.
13 mm (0.5")	Allowance for upper flooring over concrete sub-floor	If upper flooring is thicker than this allowance, choose a longer concrete anchoring fastener.
64 mm (2.5")	64 mm (2.5") Engagement into Concrete	Xult recommends a 64mm (2.5") engagement into concrete. Regardless of the type of flooring, the anchoring fasteners use must be able to withstand a pull-out force of at least 3.3 kN (750 lbs)
Remaining fastener length		Concrete fastener chosen should have a 64mm engagement into concrete as mentioned above. Any additional concrete engagement is acceptable.

CAUTION: If it is possible that the length of your concrete anchoring fastener will not provide the minimum requirement of 64 mm (2.5") of engagement, a longer anchor should be used.

INSTALLATION RECOMMENDATIONS

The following provides an example of one way in which XULT exercise equipment may be anchored.

NOTE: Building construction varies from facility to facility. This guide cannot and does not purport to provide instructions for anchoring XULT exercise equipment into any type of building construction. XULT requires specific pull-out forces for all locations where this XULT exercise equipment is anchored.

NOTE: Use a licensed contractor to ensure the required retention force is met.

TOOLS NEEDED

- Safety Glasses
- Permanent marker (fine tip) for marking hole locations
- Hammer Drill
- Impact Wrench
- Right-Angle Drive
- 8 mm x 300 mm (3/8" x 12") Carbide Drill Bit (for 8 mm (3/8") Anchors)
- Recommended concrete anchoring fasteners (Choose one):

For Metric anchor:

Hilti brand Concrete Anchor: HUS-H 8x110 (Item #368732)

For Standard anchor:

Hilti brand Concrete Anchor: KH-EZ 3/8" x 4" (Item# 418059)

- Canister of compressed air or Hand pump and hose (optional)
- Large Shim Washer (optional)

Additional Items Needed For Wall Mounting:

- Recommended concrete anchoring fasteners (Choose one):
 - Into Concrete: Recommended concrete anchoring fasteners (Choose one):
 - For Metric anchor:**
Hilti brand Concrete Anchor: HUS-H 8x110 (Item #368732)
 - For Standard anchor:**
Hilti brand Concrete Anchor: KH-EZ 3/8" x 4" (Item# 418059)
 - Into Wood: 1/2" x 2.75" Lag Screws.
 - Into Steel Studs: Dependent upon type of construction. Seek the advice of the building architect.

Follow instructions from the manufacturer of the chosen anchoring fastener for installation instructions regarding the anchoring hardware.

XULT ANCHORING PROCEDURE – This must be performed by a licensed contractor:

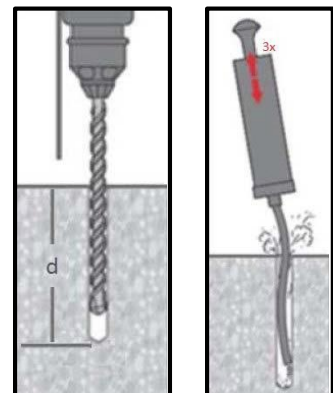
- 1) Place the exercise equipment where it is to be anchored to the floor/wall. Ensure all frame members are plumb, level and square to the environment.
- 2) Locate the position of all required wall studs. Ensure that wall mounts are securely attached to the structural components within the wall. For wood stud construction, ensure that wall mounts are secured to the center of each wall stud.
- 3) If using a stringer or other mounting hardware (such as Unistrut) to span between wall studs, appropriately position the mounting hardware on the wall and securely fasten to wall, ensuring that fasteners are centered on the wall studs. Ensure that the mounting hardware is secured to the wall studs on either side of the location where the MATRIX exercise equipment will be secured to mounting hardware.
- 4) Carefully mark all of the hole positions on the floor and wall for every anchoring point.
- 5) Ensure that every wall anchoring point on the equipment is utilized. There are multiple anchoring points per wall mounting bracket.
- 6) It is the responsibility of the fitness facility to ensure that all provided locations on the exercise equipment are anchored. Each anchoring fastener must be able to withstand a 2.2 kN (500 LBS) pull-out force from the wall.
- 7) Prior to anchoring to the floor, calculate the required length of concrete anchor. Follow instructions from anchoring fastener manufacturer to choose proper length.
 - a. If using Hilti brand concrete anchors, minimum length of anchor should be:
 - $L_{min} = 64 \text{ mm} + (\text{thickness of upper flooring material}) + \text{approx. } 6.5 \text{ mm (thickness of foot)}$
 - $L_{min} = 2.5'' + (\text{thickness of upper flooring material}) + .25'' (\text{thickness of foot})$
- 8) Calculate required hole depth. Hole depth:
 - a. Should ensure an embedded depth of the concrete anchor in the concrete to at least a depth of 64 mm (2.5").
 - b. Should be at least:
 - $(\text{Length of Anchor fastener} + 13\text{mm extra depth}) - (\text{thickness of foot})$

NOTE: 13 mm (0.5") extra depth provides extra clearance at the bottom of hole.

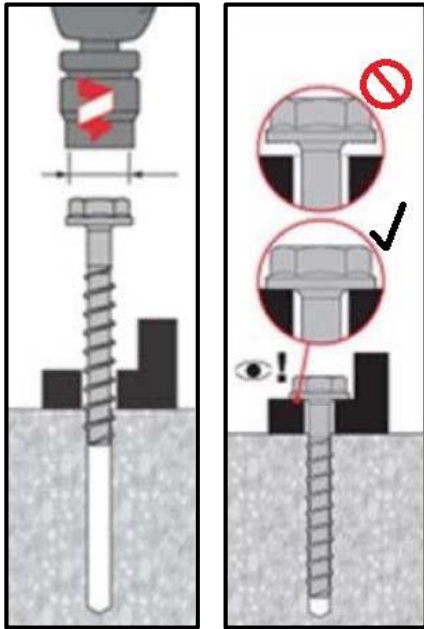
9) Wear safety glasses while drilling down into the floor.

10) Drill down into flooring to the calculated depth.

11) Required: Holes must be cleared of debris. Use canister of compressed air or hand-pump to blow debris out of the drilled holes.



12) Ensure that every anchoring point on the equipment is utilized. There are multiple anchoring points per foot.



13) If bolt-down plate or foot does not contact the mounting surface, adjust foot until it does contact the ground. DO NOT pull down with the fastener or anchor. Shim the bolt-down plate or foot with a large steel washer to close the gap if required.

14) Use impact wrench to insert concrete anchoring fastener into concrete. Torque to recommendations of anchor manufacturer. For Hilti concrete fastener, this torque would typically be to 54 Nm (40 Foot-Pounds) for an 8 mm anchor (3/8" anchor).

15) Ensure that the concrete anchoring fastener is fully seated against the bolt-down plate.

17) It is the responsibility of the fitness facility to ensure that all provided locations on the exercise equipment are anchored. Each anchoring fastener must be able to withstand a 3.3 kN (750 LBS) pull-out force from the floor.

18) Ensure that exercise equipment is stable and secure.