Fibergrate Dynaweight System Operators' Instruction Manual

Per OSHA 1926.503 it is the equipment owner's responsibility to ensure that all workers using this Anchor are thoroughly trained in its' use and limitations.



Fibergrate Dynaweight System

Tremco provides this Operators' Manual as a tool to help instruct the owner/worker in the proper use of this equipment. Tremco expects the reseller and equipment owner to comply with OSHA 1926.503 and make every effort to educate the worker in the proper use and limitations of this equipment before putting it into service.

Keep this Manual with the Fibergrate Dynaweight System at all times. This will allow new users to read it before operating this equipment. It is the Fibergrate Dynaweight System owner's responsibility to ensure that all workers using this anchor are thoroughly trained. Provide workers with this Operators' Manual. Make sure they understand its' contents. Read it to them if necessary. Letting poorly trained workers use this anchor can result in serious injury or death to personnel.



DANGER! PELIGRO!

Worker, make sure you understand and follow the Tie-Off instructions below. Not doing this may cause you to fall over the roof edge. Ask your boss/employer to explain if these are not clear to you. Have the Employer-supplied rescue plan ready to go and know how to do it.

Trabajador, asegúrese de comprender y seguir las instrucciones de sujeción a continuación. No hacerlo podría provocar una caída del borde del techo. Pregúntele a su patrón / empleador que le explique si éstas instrucciones no están claras para usted. El empleador debe tener un plan de rescate en marcha y el trabajador debe saber cómo ejecutarlo.



WARNING! Working at or near the roof edge is dangerous and can subject the Worker to serious injury or death from falls. The Roofing Contractor and the Worker must make every effort to ensure the area where he/she will be working is as safe as possible. This means taking only the tools you need to the roof edge, removing all trip hazards and loose material, the wearing <u>and proper use</u> of OSHA approved Harnesses and Life-Lines, making no sudden or unplanned moves and being constantly aware of your surroundings and your position/location relative to the roof edge.

It is also imperative that the Worker read the Operators' Manual for this equipment and thoroughly understand how to set up and use this equipment. This includes knowledge of what the equipment can do and also how to avoid situations this equipment was not designed to handle. Tremco provides this Operators' Manual at the time of sale as a tool to help instruct the owner/worker in the proper use of the equipment and expects the reseller and owner/worker to make every effort to educate themselves before putting this Fibergrate Dynaweight System into service.

FALL RESCUE PLAN:

Federal law requires the <u>Employer</u> to have a Fall Rescue Plan for their employees in the event a fall should occur.

ANSI Z359.2-2007 mandates that "Employers shall develop and maintain written fall protection and rescue procedures for every location where an active fall protection system is used to control a fall".

ANSI Z359.2-2007 Section 6.1:

"The employer shall provide prompt rescue to all fallen authorized persons"

ANSI Z359.2-2007 Section 6.2:

"Written rescue procedures shall be prepared and maintained by the competent person for all instances where authorized persons work at heights. Such procedures shall contain provisions for the prompt rescue and self-rescue of any authorized person who falls".

ANSI Z359.2-2007 Section 6.3 provides specific guidelines regarding the circumstances during which emergency services can be called to carry out a rescue.

ANSI Z359.2-2007 is very specific about the roles of all individuals involved in the rescue process.

OSHA 1910.66 subpart F Section 1(e)(8) states "The employer shall provide for prompt rescue of employees in the event of a fall or shall assure the self-rescue capability of employees."

OSHA 1926.502(d)(20) reads "The employer shall provide for prompt rescue of employees in the event of a fall or shall assure that employees are able to rescue themselves."

Refer to these standards in their entirety for specific requirements regarding the creation and use of a Fall Rescue Plan.

Tremco strongly advises the employer to read, understand and adhere to these Federal Standards.

Tremco recommends that no worker be on the roof or sent to any job or repair site by themselves. This leaves the worker unaided should an accident occur regardless of its' nature.

Signal Word in Manual

WARNING! Indicates a hazardous situation which, if not avoided, could result in death or serious injury

Fall Prevention Safety Tips for Employers

Falls from elevations account for approximately one-third of all deaths in construction. The following tips highlight some of the key issues that employers should consider when planning, implementing, and maintaining their fall prevention programs.

- 1. Develop a written fall prevention plan.
- 2. Identify potential fall hazards prior to each project and during daily walk-arounds. Pay attention to hazards associated with routine and non-routine tasks.
- 3. Eliminate the need for fall protection where possible by rescheduling the task, isolating the task, or changing the task.
- 4. Ensure fall protection equipment is appropriate for the task, in good condition and used properly.
- 5. Conduct general fall prevention training on a regular basis.
- 6. Train workers on the specific fall hazards identified and on the required personal protective equipment.
- 7. Conduct regular inspections of fall protection equipment in accordance with manufacturer's recommendations and OSHA requirements.
- 8. Emphasize fall hazards unique to the site, such as open floor holes or shafts, riser penetrations, and skylights.
- 9. Team up with other construction employers and employees to identify best practices and share fall prevention solutions.
- 10. Get more information from the Occupational Safety and Health Administration (OSHA): Visit OSHA's Website at www.osha.gov or call (800) 321-OSHA.

Fall Prevention Safety Tips for Employees.

- It only takes a second for a fall to occur. Falling a few feet can result in serious injury or death.
- 1. Understand your company's written fall prevention plan.
- 2. Attend and participate in fall prevention training.
- 3. Use fall protection equipment if required for the job. Be sure that the equipment is right for the task, fits properly, and is in good condition.
- 4. Inspect fall protection equipment (for example, harness systems) and devices (for example, guardrails and tie-off points) before each use.
- 5. Make sure that floor holes, open shafts, and riser penetrations are protected by sturdy guardrails or covers.
- 6. Get specialized training before working on scaffolds, lifts, or ladders.
- 7. When using scaffolds, make sure there is proper access, full planking, stable footing, and guard railing.
- 8. Keep your feet firmly on the platform of a boom lift and tie-off at all times.
- 9. Chose the correct ladder for the task, read the instructions, and be sure that the ladder is in good condition. Check for surrounding hazards, stable footing, and the proper angle.
- 10. Identify skylights and make sure they are properly protected.
- 11. Contact your supervisor if you see fall hazards or have any other questions about fall prevention. Do not work until unsafe conditions have been corrected.

Fibergrate Dynaweight System Operators' Instructions



Specifications:

Transporter Length	95"
Height	25"
Width	53"
Anchor Weight	930 lb
Transporter Weight	124 lb
Tire Contact Pressure	41 PSI
Contact Pressure	1.45 PSI
Counterweights	Quantity: 14 Steel Ballasts supplied by Fibergrate Safety Systems.

INTENDED USE This machine is intended for the sole purpose of providing Fall Protection for workers working <u>at or near a roof edge</u>. This machine may only be used on flat, level roofs only with a maximum pitch of ¹/₂ in per ft (.5:12). Any other use of this equipment voids the manufacturer's warranty and is the sole responsibility of the owner/user should any damage or injuries occur

Limitations:

The Fibergrate Dynaweight System has been tested and approved for 1-Person Fall Arrest plus 1-Person Fall Re-straint for the following roof substrates (coverings):

- Built-up roofing systems (BUR)
- TPO / EPDM Adhered Membranes
- Metal Decks 22 gauge minimum.
- Plywood/Hardboard Decking
- ISO insulation
- Concrete

OPERATOR PREPARATION:

Read Operators' Instruction Manual!

Reading and understanding the instructions completely is the first step to safe operation. An uninformed operator can subject themselves and others to serious injury or death.

NOTICE TO OPERATOR! Make sure you have a thorough knowledge of how to set up and use the Life Point System, as well as a complete understanding of the systems' limitations and conditions for use before you attach yourself to the system. READ THE OPERATORS' INSTRUCTION MANUAL!

Wear Proper Attire When Roofing

When doing roofing or roofing repair work, wear safety glasses and protective clothing if any cutting, scraping, or sweeping is being done in your work area. Wear safety shoes. Hard hat must be worn by Worker when work is being done overhead. When working with hot stuff, long sleeved cotton shirt buttoned at sleeves and collar must be worn (or other suitable protective clothing). Long pants without cuffs and a face shield are also required when working with hot bitumen.

1. Assembly Instructions for Anchor:

BEFORE HOISTING OR CARRYING DYNAWEIGHT SYSTEM TO THE ROOF:

Make sure roof is in good condition. It must be able to support the combined weight of the Dynaweight System (930 lbs.) plus all material, equipment and personnel which will be near or working near the system.

If assembling anchor on roof or other elevated surface, assemble in a location at least 15 feet from a fall edge. Use only Fibergrate Safety System ballast weights. The use of any other ballast may result in an anchor not able to arrest a fall, causing serious injury or death to user.

Be sure to include the Building Owner and/or a certified Architect when making this evaluation.

1) Place 14 Fibergrate Safety Systems Ballast Weights (PN: 408996S) in Anchor Base.



2) Insert both Lock Bars through the ends of the Anchor Base. (Bar will pass through the middle ballast only) Secure the Lock Bar in place using 4 Hairpins Cotter Pins



3) Insert the Lift Bar into the Anchor Base. Secure the Lift Bar using 2 Locking Pins. Flip the ring on the Locking Pin to ensure the pins in locked in place. See detail A







When hoisting the anchor **ONLY** use the point at the center of the lift bar.



2. CHOOSING A LOCATION FOR THE ANCHOR ON THE ROOF:

WARNING

Inspect the area over the roof edge where you will be working and make sure there are no objects below the edge such as balconies, awnings, lights, security cameras or anything else protruding from the side of the building that you may hit in the event of a fall.

Location

Fibergrate Dynaweight System must be placed at minimum of 15 feet from roof edge and parallel to the roof edge.





MARNING Stay Inside The SAFE ZONE. If you must move side to side along the roof edge for brief periods to perform your work, move slowly and do not go any farther than 45 degrees to the right or left. This is the SAFE ZONE. Leaving this zone will put you in DANGER and may cause serious injury or death to you should you fall over roof edge.

FALL EDGE

Never work in, move to or in any way inhabit the areas outside, to the left or right of the SAFE ZONE while attached to the Dynaweight System anchor. The Dynaweight System is not designed to protect the Worker at these extreme angles.

3. ROOF PREPARATION:

WARNING BEFORE PLACING ANCHOR IT IS CRITICAL TO PROPERLY PRE-PARE THE AREA. USE PROVIDED INSTRUCTION.

- Anchor must be placed at least 15 feet from roof edge and parallel to the roof edge.
- Anchor must be located straight back from the area where you will be working.
- Remove all debris and loose roof coverings from the area where you will locate the Anchor for use.
- Make sure the area is free of ice, snow, water, oils, dirt, dust or any other substance upon which the Anchor may slide. Sweep the area free of all dust and dirt.
- On Hot Built-Up (BUR) roofs, sweep a 5 foot X 6 foot area completely free of loose gravel. Set the Anchor on this completely swept area.
- On gravel topped roofs, BUR, Ballasted etc... thoroughly sweep away all gravel, dirt and dust over the area where you will locate the anchor. Allow at least 3 feet of swept area in front of the Anchor (direction toward roof edge).



TOWARD ROOF EDGE

When attaching to a Dynaweight anchor that has been left on the roof over time, where there has been any **snow/ice accumulation**, you MUST clear a minimum of 3 feet area in front of the ensuring to remove any snow/ice covering the roof substrate.

4. MOVING THE ANCHOR TO NEW LOCATION:

1) Pull the transporter in front of the anchor



2) Pull the transporter back towards the anchor and hook the anchor by the lift bar. Turn the Handle Nut to adjust height as necessary to reach the lift bar.



3) Turn the Handle Nut clock wise to raise the anchor off the ground.



4) Lift handles and push transporter forward to desired location.

WARNING



Do not attempt to lift by bending forward. Bend your hips and knees to squat down to the load, keep it close to your body, and straighten your legs to lift.

5) Prepare your new location using instructions on PAGE 19

- 6) Place the anchor in the new
 - a) Slowly lower the handles

b) Turn the Handle Nut counter clock wise to lower the anchor to the ground.

c) Push transporter forward to disengage the hook.

5. ATTACHING YOURSELF TO THE ANCHOR:

Attach an approved commercially available life-line to the Tie Off Bracket in the center of the anchor.

Use self-locking snap hooks and carabineers only when hooking up to this machine. Use attaching hardware that is specifically designed for Fall Protection devices. After attachment, make sure all connectors are closed and locked in place.

Connect to the Green Bracket only for Fall Arrest. Adjust length of Life-Line to be no more than 2 feet longer then the distance from cart to roof edge.

Connect to the Round Loop only for Fall Restraint.

Adjust the length of your Life-Line so your shoulders can not extend over the roof edge.

It is the responsibility of the Life-Line user to adjust the length of his/her Life-Line as described above. Proper length adjustment will prevent excessive fall height, lessening the chance of injury to user.

Inspect the area over the roof edge where you will be working and make sure there are no objects below the edge such as balconies, awnings, lights, security cameras or anything else protruding from the side of the building that you may hit in the event of a fall.

STAY INSIDE THE SAFE ZONE.

When working at the roof edge, locate the Life Point System so it is straight back from the area where you will be working.

If you must move side to side for brief periods to perform your work, move slowly and do not go any farther than 45° to the right of left. This is the **SAFE ZONE**. Leaving this zone will put you in DANGER and may cause serious injury or death to you should you fall over roof edge.

Never work in, move to or in any way occupy the areas outside of the SAFE ZONE while attached to the Life Point System. It is not designed to protect the Worker at these extreme angles.

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Complete Transporter Assembly Part # 301511

#	PART #	DESCRIPTION	QTY.
1	409736	CART FRAME - LOWER	1
2	408067	ADJUSTER CLEVIS - CART	1
3	101019	WASHER .75X1.62 PLAIN	1
4	408068Z	NUT - HANDLE WLD ZINC	1
5	155510	LOCK PIN31 DIA X 1.75 LG	2
6	100303	.50 x 1.50 CLEVIS PIN	1
7	427869Z	HOOK - CART ZINC	1
8	100168	COTTER PIN .12 X 1.0	1
9	156197	END CAP-PLASTIC 2 X 3	2
10	150825	CAP-PLASTIC 2.00	2
11	100160	COTTER PIN 3/16 X 1-1/2	2
12	100575	1.0 FLAT WASHER	2
13	200632	WHEEL-18 X 8.50 F'LITE	2
14	408082	CART FRAME - UPPER	1
15	150473	GRIP- BLACK-1.25	2
*	161471	LABEL-DYNAWEIGHT CARRIER LOGO	1
*	161468	MANUAL-DYNAWEIGHT	1
*	161074	DECAL-PATENT PENDING-SMALL	1
*	161337	DECAL-INTRUCTION TUBE	1
*	155563	PALLET - DYNAWEIGHT	1
*	161713	LABEL- DYNAWEIGHT USE INSTR	1

Complete Anchor Assembly Part # 301512

#	PART #	DESCRIPTION	QTY.
1	408976	BOX WELD-PVC DIPPED	1
2	408996S	STEEL WGT-LP TWIN	14
3	409746Z	LIFT BAR WELDMENT	1
4	430733Z	ROD-RETAINER	2
5	150127	HAIR PIN COTTER	4
6	101216	QUICK PIN	2

