May 2023
Rev. 23.001

SPEED EDGE

SPEED FAN

INSTRUCTION MANUAL

www.speededge.net

CONDITIONS OF SAFE USE

USER RESPONSIBILITIES

DO NOT ASSEMBLE, INSTALL OR SERVICE SPEED EDGE PRODUCTS OR ACCESSORIES WITHOUT READING THIS MANUAL.

Use of the manual

- Instructions are to be made readily available to all users.
- Users are responsible for observing all safety precautions as required by local health and safety regulations.
- Users should be familiar with this manual and have a reasonable understanding of all requirements herein.
- Users who are not able to read and understand the manual in its entirety must be trained and supervised by a competent worker who is capable of communicating all information in the manual and any relevant site-specific documentation.
- This manual describes only the application and use of Speed Edge equipment. Descriptions and illustrations may omit other equipment or work taking place adjacent to this system. The user is responsible for coordinating and ensuring safety of the entire work area is maintained throughout all stages of work.

Planning

- User should review all relevant Speed Edge documentation in conjunction with site contract documents prior to installation.
- Any application which deviates or is not fully described in this manual and the provided site-specific instructions, requires consultation and approval by Speed Edge.

Hazard assessment

- This manual provides information for consideration when developing a site-specific hazard assessement.
- It is the user's responsibility to perform a site-specific hazard assessment at each installation, modification, or dismantling of the system.

Planning

- User should review all relevant Speed Edge documentation in conjunction with site contract documents prior to installation.
- Any application which deviates or is not fully described in this manual and the provided site-specific instructions, requires consultation and approval by Speed Edge.

General use

- Ensure that all supporting structures have adequate capacity to support loads imposed by Speed Edge systems.
- Ensure stability of material during installation and dismantling operations.
- Ensure compliance with all local health and safety regulations, all site requirements, and all applicable safety standards.

EQUIPMENT USE

Inspection

- All inspections to be carried out by a competent worker familiar with the system and maintenance requirements.
- All equipment to be inspected by a competent worker prior to installation.
- Damaged or defective equipment must be tagged and removed from service.
- User is responsible for regular inspection in accordance with the equipment inspection schedule provided in the manual.
- Equipment should be inspected after any significant loading, impact or weather event.

Regular Duties

- Debris should be removed from the net daily or any time a large object is in the net. Accumulation of debris in the net will reduce the capacity of the net.
- Snow accumulation should be removed from the net as soon and as frequently as possible. All snow accumulation will reduce the capacity of the net.
- Speed Fan should be closed prior to expected any expected snow fall.

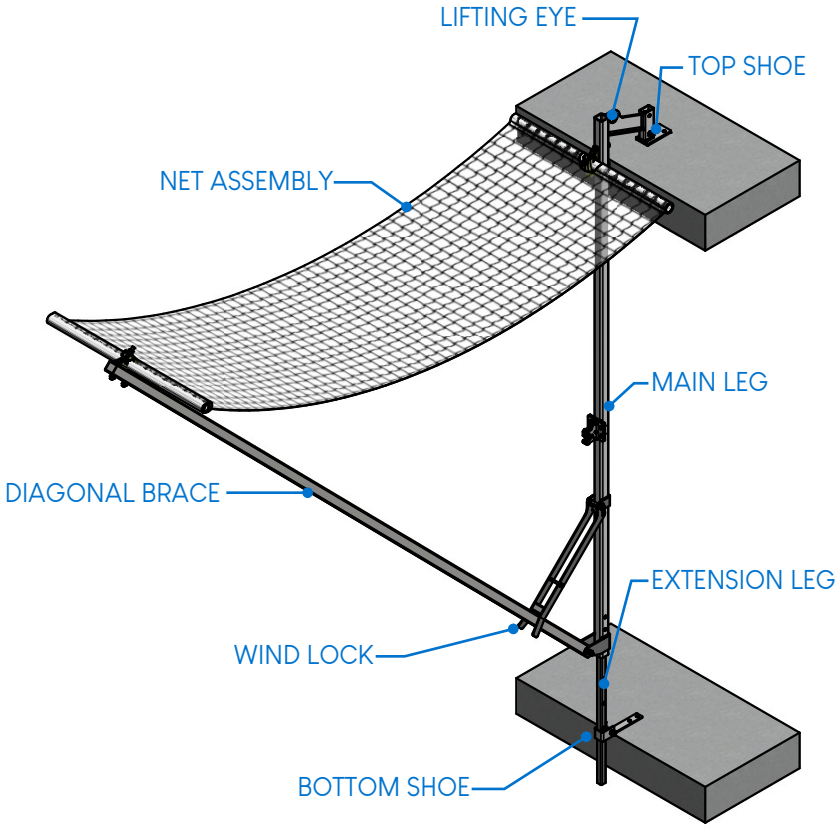
System application

- Speed Fan top and bottom shoes have to be anchored with specified anchors. Refer to the chart in the installation details for approved concrete anchors. (Alternative connections are possible, please inquire)

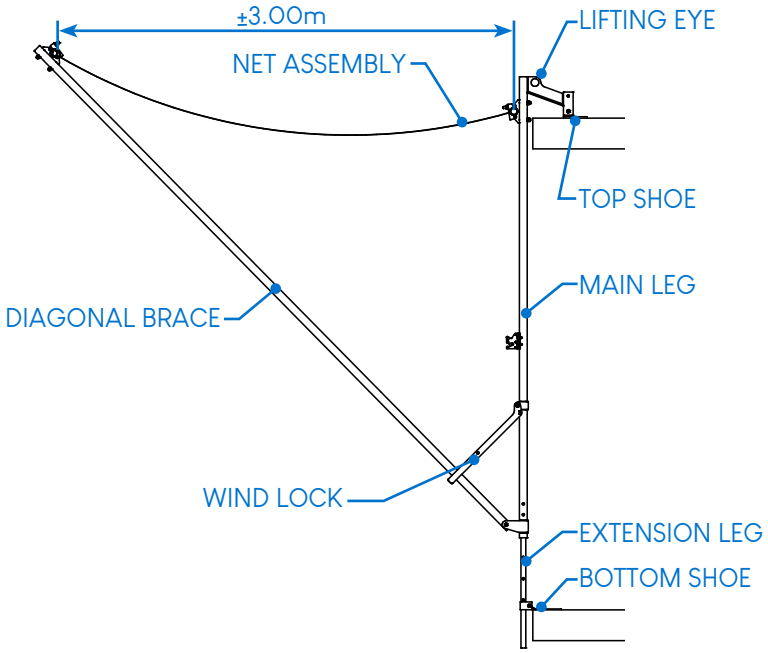
1. Speed Fan is only to be used with guardrails or fall arrest equipment meeting all local health and safety regulations.
2. Personnel are not allowed on the net at any time.
3. Installers are to wear fall protection equipment, meeting all local health and safety regulations, anchored to existing building structure.
4. Speed Fan is an energy absorbing system. User should review provided charts to determine capacity at their anticipated drop height.
5. Speed Fan does not replace overhead protection where required by local health and safety regulations but is intended to be an addition to any mandated overhead protection.
6. Speed Fan is not intended for personnel fall protection.
7. When the wind exceeds 18 mph (30 km/h) or the weather conditions are adverse, do not attempt to raise the Speed Fan from floor to floor using the Lifting Device (LD280)
8. At all times, local health and safety codes and standards should be referred to and followed. Please contact Speed Edge if uncertain.

SYSTEM OVERVIEW

SPEED FAN COMPONENTS



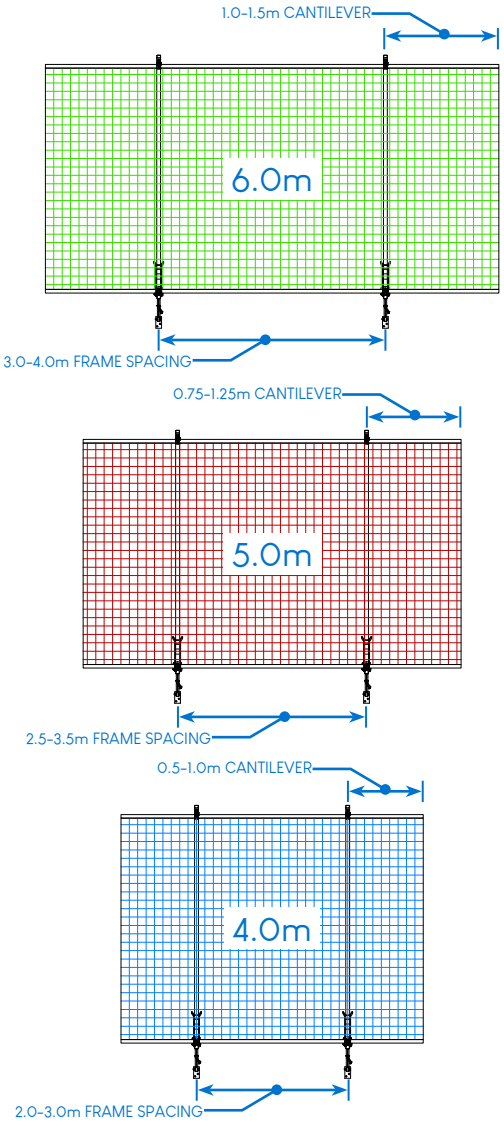
SPEED FAN - FRAME ISOMETRIC



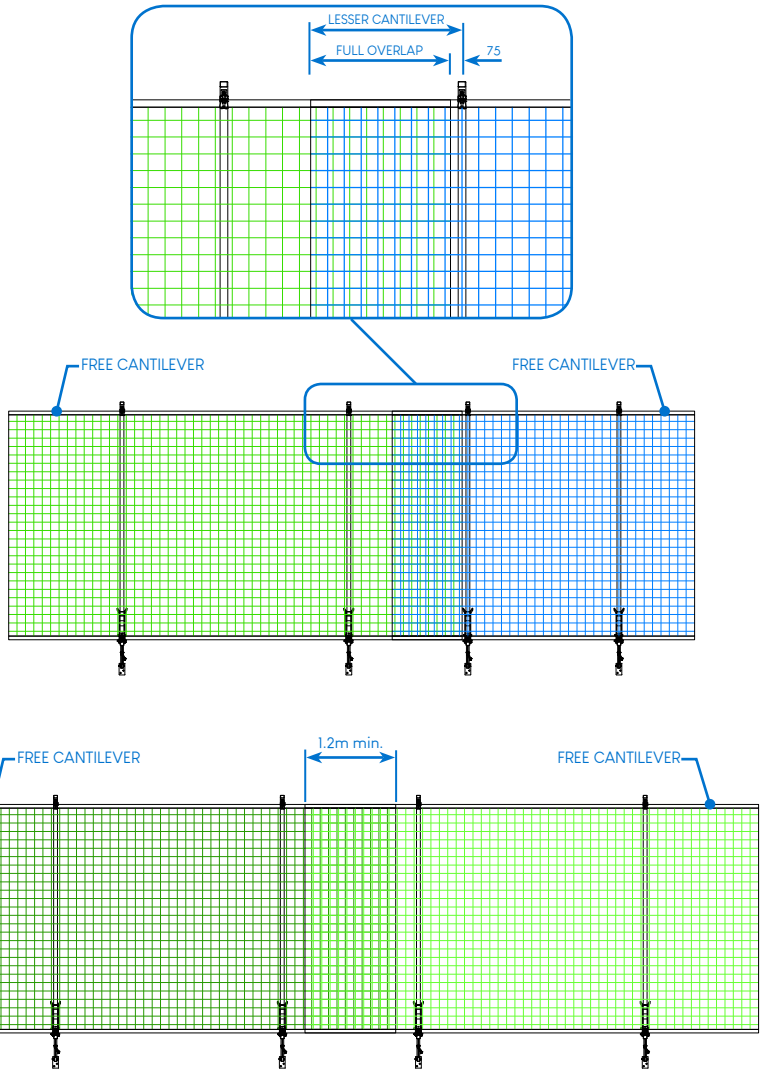
SPEED FAN - TYPICAL SECTION

LAYOUT AND SETUP DETAILS

TYPICAL UNITS



OVERLAP REQUIREMENTS



To achieve full system capacity:

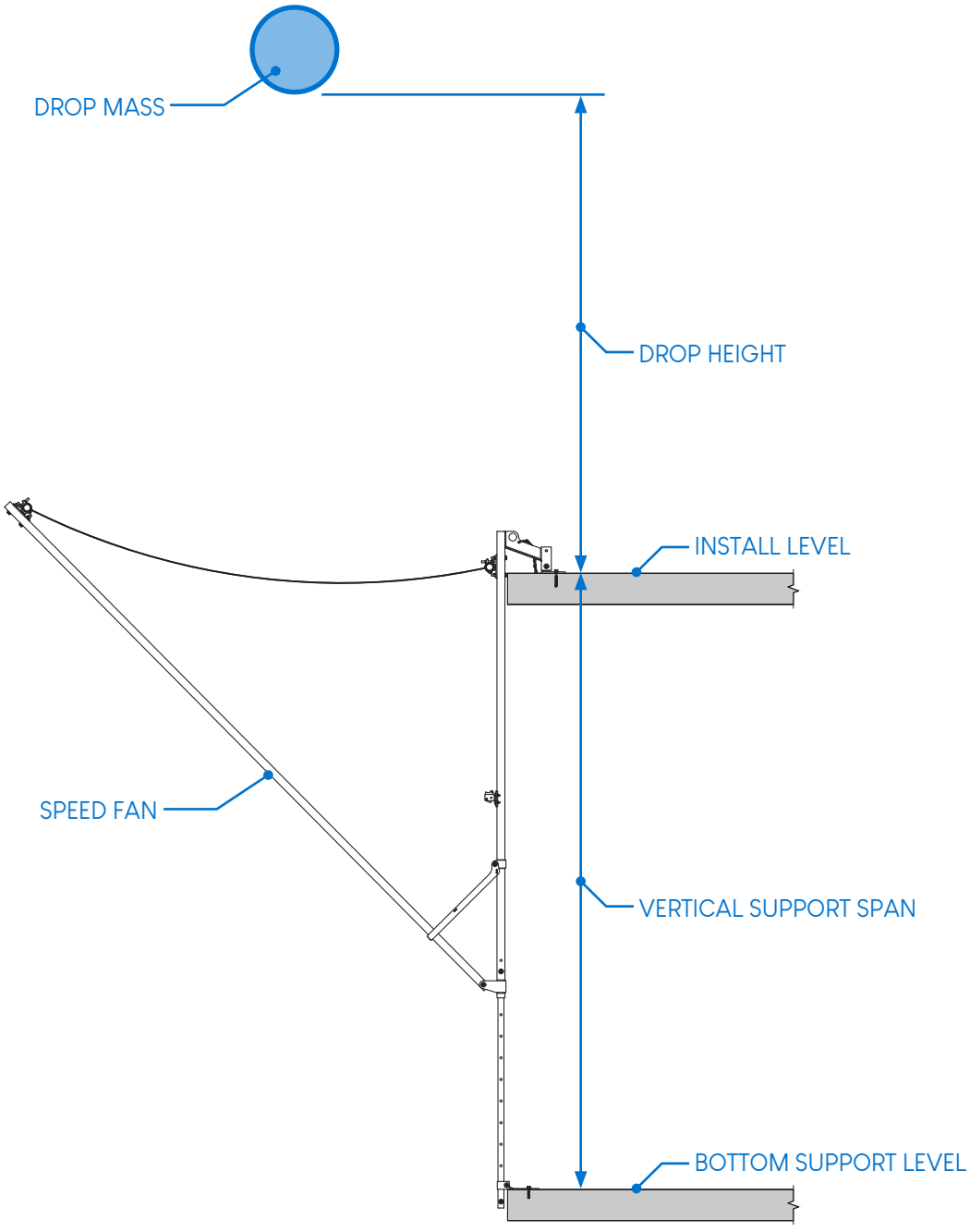
Cantilevers greater than 1.2m require at least 1.2m overlap
Cantilevers less than 1.2m require full overlap.

Full overlap is considered to be 75mm less than the lesser of two overlapping cantilevers.

Overlaps less than those specified, and free cantilevers, have a reduced capacity.

LOADING CONDITIONS

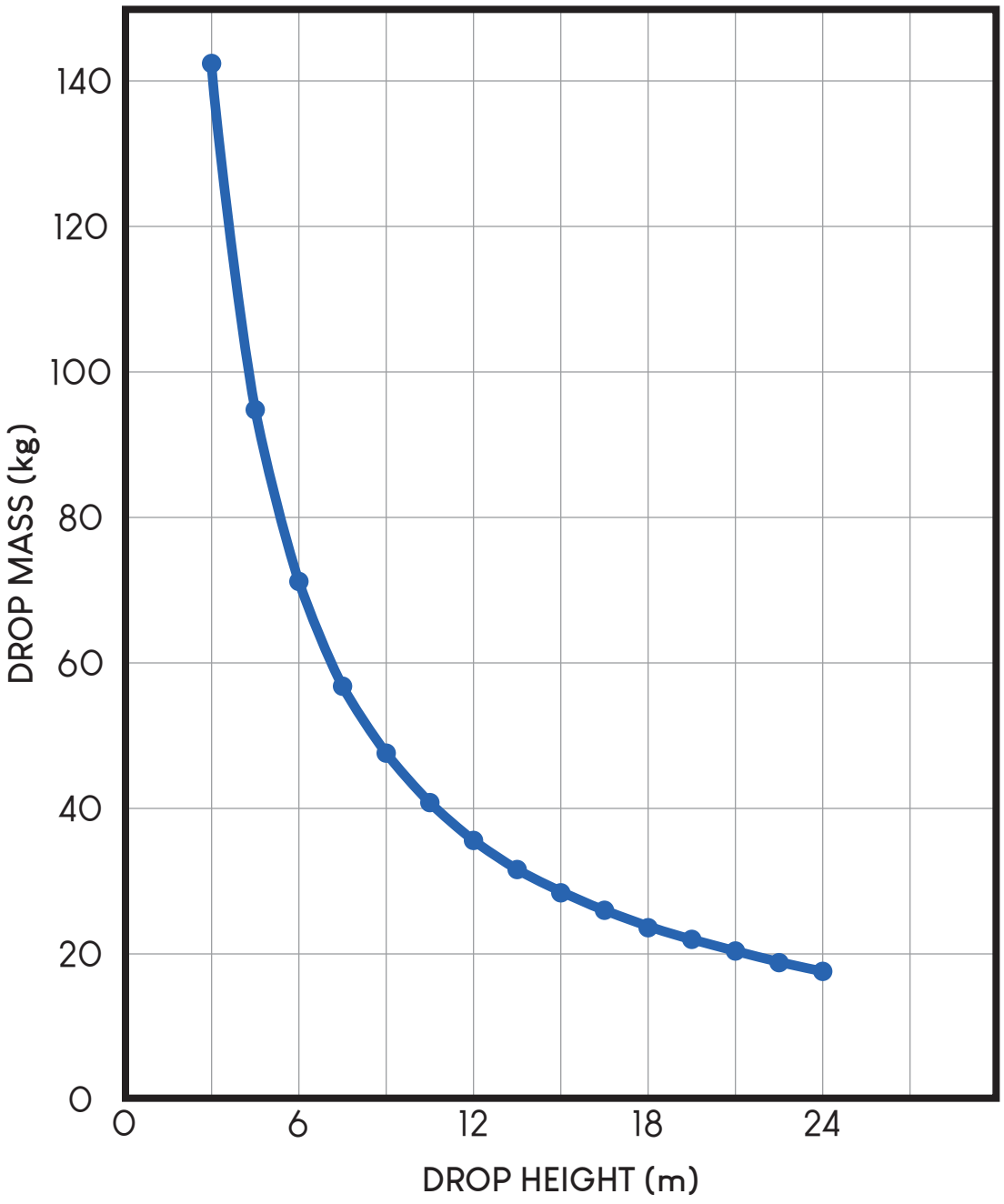
LOAD APPLICATION DIAGRAM



LOAD RETENTION CAPACITIES ARE PROVIDED BASED ON THE ACCELERATION OF MASS ACTED ON BY GRAVITY ONLY. NO INITIAL VELOCITY, WIND SPEED OR OTHER EXTERNAL FACTORS ARE CONSIDERED. THE SPEED FAN DEBRIS NETTING IS RATED SEPARATELY FOR CUT AND ABRASION RESISTANCE. ACTUAL LOAD RETENTION FOR SHARP OR ODD SHAPED OBJECTS MAY VARY.

VERTICAL SUPPORT SPANS
UP TO 10’-0” (3.05m)

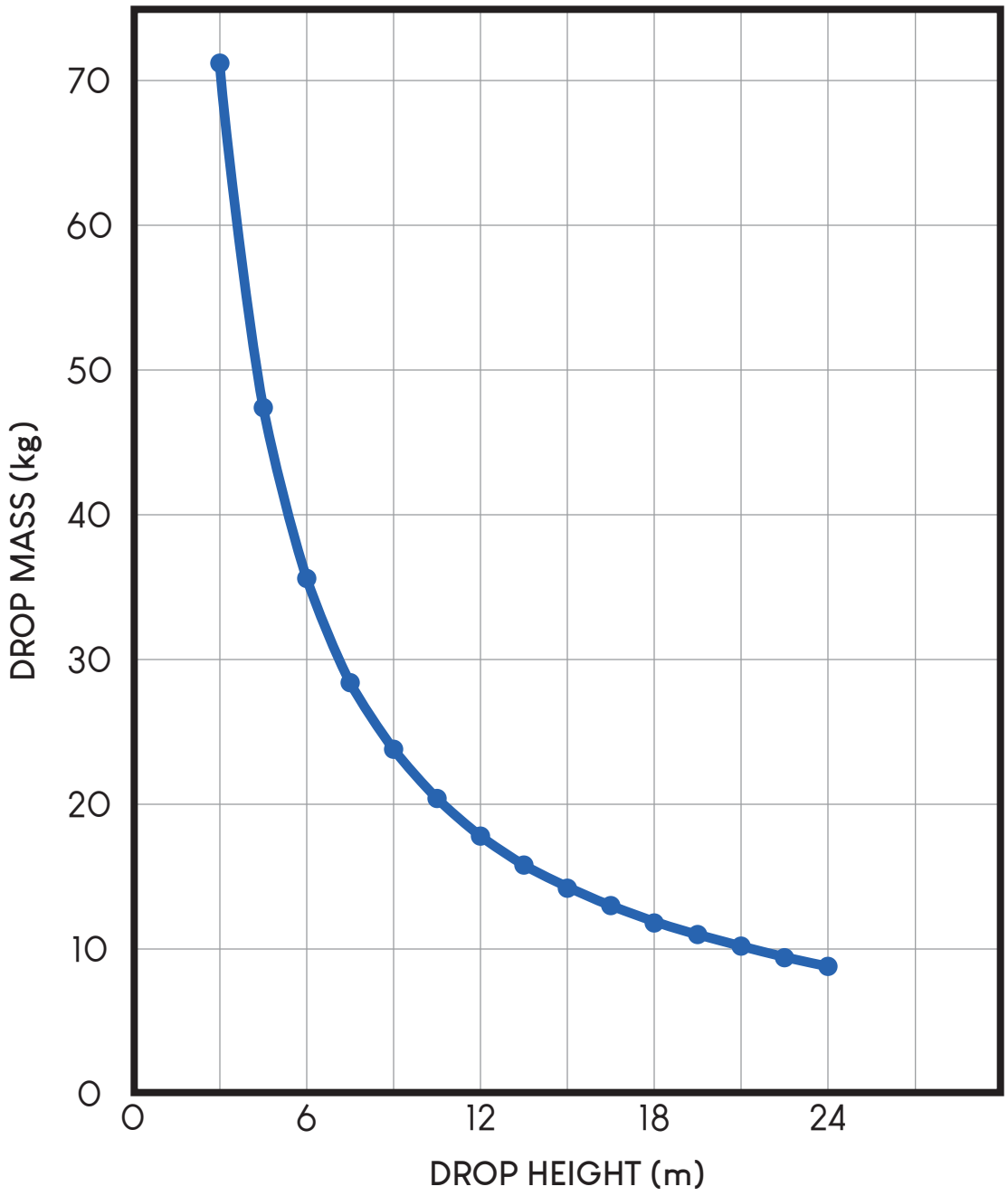
SYSTEM LOAD RETENTION CAPACITY



SYSTEM CAPACITY IS SUBJECT TO LAYOUT AND INSTALLATION IN ACCORDANCE WITH THE SEALED SITE-SPECIFIC TYPICAL DRAWINGS. ALL RESTRICTIONS AND LIMITS MUST BE OBSERVED. NON-STANDARD INSTALLATIONS MAY HAVE A REDUCED CAPACITY. PLEASE CONTACT YOUR SPEED EDGE REPRESENTATIVE FOR FURTHER INFORMATION.

VERTICAL SUPPORT SPANS
FROM 10’-0” (3.05m) TO 13’-9” (4.20m)

SYSTEM LOAD RETENTION CAPACITY



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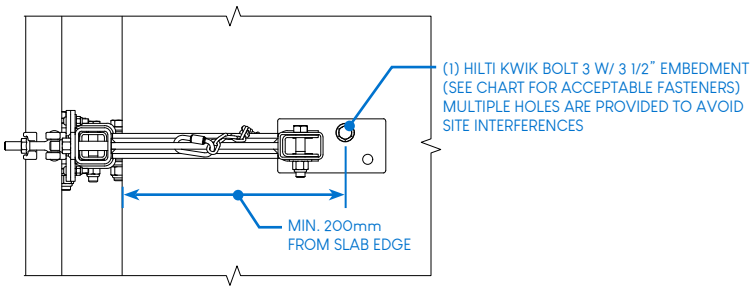
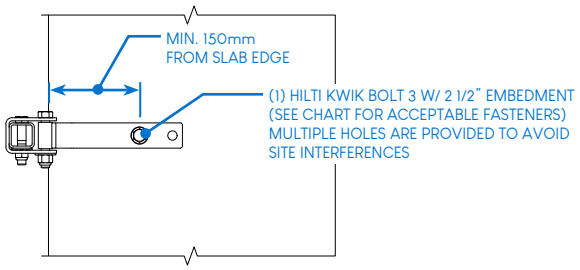
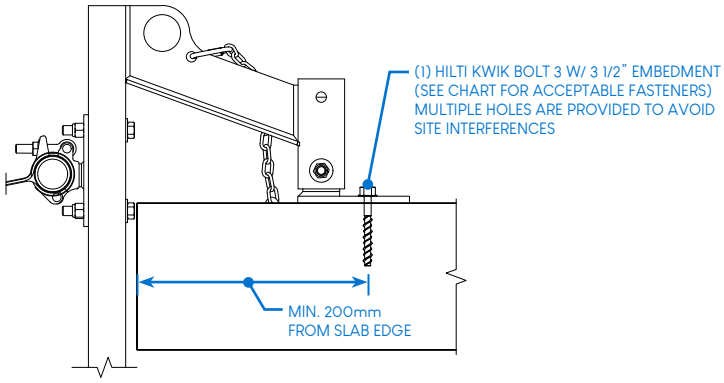
INSTALLATION DETAILS



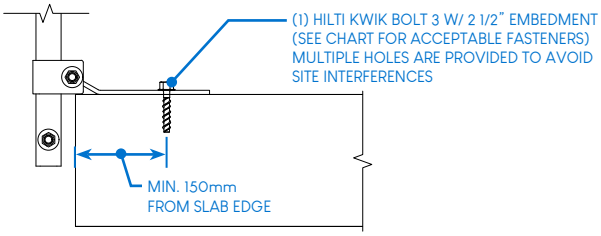
TOP SHOE PLAN



BOTTOM SHOE PLAN



TOP SHOE SECTION



BOTTOM SHOE SECTION

OPTIONS FOR CONCRETE ANCHORS

TOP SHOE/LIFTING DEVICE			BOTTOM SHOE		
Product	Size	Min. Embedment	Product	Size	Min. Embedment
HILTI KWIK BOLT 3	Ø1/2"	3 1/2"	HILTI KWIK BOLT 3	Ø1/2"	2 1/2"
HILTI KWIK HUS	Ø1/2"	3 1/2"	HILTI KWIK HUS	Ø1/2"	2 1/2"
DEWAL SCREW-BOLT+	Ø1/2"	3 1/2"	DEWAL SCREW-BOLT+	Ø1/2"	2 1/2"

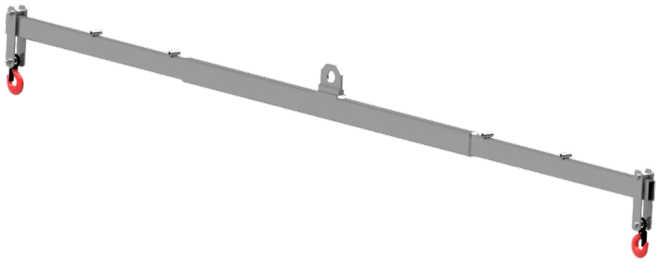
ALTERNATE ANCHORS MUST BE REVIEWED AND APPROVED
BY SPEED EDGE PRIOR TO USE. PLEASE INQUIRE.

SYSTEM COMPONENTS

EQUIPMENT DESCRIPTION (PRODUCT CODES)

LIFTING DEVICE (LD280)

SPEED FAN (SF63) [19'-8" / 6.00m]
OR (SF43) [13'-1" / 4.00m]



SPREADER (SD280)

SPEED POST (SP)

ELECTRIC HOIST
(HD2000 1A34-F-01)

Electric hoist – Configurations and performance characteristics

Model number	Motor HP		Power Input		Gear Ratio	Estimated Capacity (lbs)		
	HP	RPM	Voltage	Ø		First Layer	Mean Drum	Full Drum
HD2000	0.5	3450	115/230	1Ø	216 : 1	2,000	1,464	1,146

Performance based on intermittent duty cycles

(Refer to manufacturer instruction manual)

INSTALLATION

INSTALLATION PROCEDURE

INSTALL FRAME ASSEMBLIES FOR LOWER NETS

1. Workers to pre-assemble all tools required to install the Speed Fan Frame Assembly at the slab edge adjacent to the Frame installation location.
2. Verify all work's tools and equipment are properly secured, or tethered as per the local safety regulations and Pre-installation Checklist.
3. Verify all components of the Frame Assembly are securely connected and in good working condition.
4. Verify a chain is secured around the Diagonal Brace to the Frame Leg pick point to prevent opening of the Diagonal Brace.
5. Secure the Frame Assembly tether to the building or a crew member (Spotter) holds the tether taut away from slab edge.
6. Second worker (Placer) slides the Frame Assembly slowly over the building slab edge and lowers until the extension leg bears on the face of the slab edge below.
7. The Placer positions the top shoe at the marked location, drills and installs the anchor (see manufacturer instructions for anchor installation procedure).
8. Once Frame Assembly is fully secured to slab, Placer may remove the tether.
9. Repeat steps 1-8 for each Frame Assembly in the "Lower" position as marked out on slab (see Pre-installation Checklist and Installation Manual)

INSTALL NET ASSEMBLIES FOR LOWER NETS

10. Roll out the Net Assembly on slab.
11. Verify fine debris mesh is on top and coarse debris mesh is on the underside.
12. Verify all components of the Net Assembly are securely connected and in good condition.
13. Verify the scaffold tube clamp on the Diagonal Brace is open and ready to receive the Net Assembly tube.
14. Have one worker at each end of the net, lift the outer net tube into the net tube clamp on the Diagonal Brace.
15. One worker holds the net tube in place while the other member secures and tightens each tube clamp.
16. Tether the outer net tube back to the structure or the Spotter holds the tether securely well away from slab edge and restrains the outer net tube from extending away from the building.
17. Placer verifies the Frame Leg net tube clamp is open and ready to receive the Net Assembly tube and removes the chains from each Diagonal Brace
18. Placer lifts the inner net tube into the Frame Leg tube clamps, then secures and tightens both tube clamps
19. Spotter slowly walks the pull rope out to allow Speed Fan assembly to open fully. *Lower position Speed Fans remain open until after Upper position Speed Fans are fully installed
20. Repeat steps 10-19 until ALL Lower position Speed Fans are fully installed

INSTALLATION

INSTALLATION PROCEDURE (CONT'D)

INSTALL FRAME ASSEMBLIES FOR UPPER NETS

21. Repeat steps 1-9 for all Frame Assemblies in the Upper position.

INSTALL NET ASSEMBLIES FOR UPPER NETS

22. Repeat steps 10-20 until all Upper position Speed Fans are fully installed

SECURE BOTTOM SHOES

23. Worker(s) move to the floor below the main installation level, untie the tie-wire restraining the Bottom Shoe from sliding along Frame Leg.
24. Position the Bottom Shoe on the slab, then drill and install anchor (see manufacturer instructions for anchor installation procedure.

RELEASE WIND LOCK

25. Pivot all Wind Locks down until each stops in its resting position.

PREINSTALLATION CHECKLIST

ATTENTION:
The Procedures and Checklists are supplementary to all health and safety regulations. All work must be in conformance with all applicable local health and safety laws, regulations and standards. All fall protection requirements are to be followed in accordance with local requirements.

SITE ORIENTATION

- ☐ Workers conducting the installation and supervision of the Speed Fan system are trained and have read and understand all the manufacturer's instructions.
- ☐ Workers have been given a site-specific orientation by the General Contractor and have been made aware of any site-specific safety requirements and procedures.
- ☐ General Contractor and Crane Operator have been notified of the installation areas of the Speed Fan.
- ☐ Workers have conducted a pre-installation hazard assessment of the installation locations.
- ☐ Top of the slab to top of the slab is measured from the installation level to floor below.
- ☐ Fall arrest anchorages are available for each installation worker to tie off to during installation.

INSTALLATION AREA PREPARATION

- ☐ Installation area to be cordoned off with red DANGER tape with signage for fall hazard.
- ☐ Ground floor area below installation area is secured with CAUTION DO NOT ENTER tape and DANGER: SPEED FAN INSTALLATION ABOVE sign is posted at all access points.
- ☐ Installation area is cleared of all debris, garbage or small equipment that could fall off the building once fence system is removed.
- ☐ Shop Drawings are reviewed for installation requirements and dimensions confirmed.
- ☐ Edge protection guardrail system is removed and stored safely until re-installation after Speed Fan installation is complete. Fall protection required.
- ☐ The Slab edge is measured and marked with frame anchor locations. "Upper" or "Lower" frame position is labelled.
- ☐ Hazards, interferences, and unique conditions are noted and addressed in Shop Drawings and/or by an Engineer.
- ☐ All props and nearby equipment that are not able to be removed from installation area are to be inspected and secured in place or are to be temporarily tethered during installation.

EQUIPMENT PREPARATION

- ☐ Frame leg, shoes and diagonal braces are placed and assembled at each frame location with extension leg towards the slab edge and frame oriented perpendicular to slab edge.
- ☐ Extension leg is adjusted to the floor-to-floor measurement plus 200mm (8") from Top Shoe.
- ☐ All frame members and fasteners are inspected for visible damage and removed from service if damaged.
- ☐ Wrap a chain around the diagonal brace and secure to Frame Leg pick point.
- ☐ Inspect the chain for any visible damage and replace if damaged.
- ☐ Net assemblies are placed adjacent to their install locations.
- ☐ All tether lines and PPE are inspected and are verified to be in good working condition.

DURING INSTALLATION

- ☐ Speed Fan frame and all components are tethered before exposing the fall hazard edge until the frame is fully secure to slab
- ☐ All installation workers are wearing personal fall protection equipment meeting the requirements of the local jurisdiction.
- ☐ All workers hard hats are to be tethered to the worker's harness or secured with a chin strap.
- ☐ All power tools and hand tools are tethered with approved tether lines.
- ☐ Min. 2 workers are required for installation.
- ☐ All site-specific safety rules and regulations are followed and respected.

INSTALLATION

POST-INSTALLATION CHECKLIST

ATTENTION:
The Procedures and Checklists are supplementary to all health and safety regulations. All work must be in conformance with all applicable local health and safety laws, regulations and standards. All fall protection requirements are to be followed in accordance with local requirements.

SYSTEM VERIFICATION & INSTALL CLOSEOUT

- ☐ Verify the Speed Fan can be fully retracted and extended without snagging or any restriction of motion.
- ☐ Verify pull rope is secured to the Speed Fan outer net tube.
- ☐ Verify Speed Fan tie-off point is available and installed properly to restrain the Speed Fan in the closed position when required by site or according to the Speed Fan Manual and Shop Drawings.
- ☐ Verify the fine debris mesh is on top and the coarse debris mesh is on underside of Net Assembly.
- ☐ Verify all scaffold tube clamps are tightly secured around inner and outer scaffold tubes.
- ☐ Verify all the top and bottom shoes are anchored correctly into the slab (see manufacturer instructions for anchor installation).
- ☐ Verify the Wind Locks lower fully to the resting position when Speed Fan is fully open.
- ☐ Re-install all edge protection guardrails removed during Speed Fan installation.
- ☐ Verify all edge protection guardrail systems are in place and remove all DANGER & CAUTION tape and signage demarcating installation area.
- ☐ Notify the Constructor and Crane Operator that Speed Fan installation is complete.

CLIMBING

CLIMBING PROCEDURE

CLIMB FRAME ASSEMBLIES FOR UPPER NETS

1. Workers to pre-assemble all tools required to uninstall the Speed Fan Frame Assembly at the slab edge adjacent to the Frame de-installation location.
2. Workers to pre-assemble all tools required to install the Speed Fan Frame Assembly at the slab edge adjacent to the Frame re-installation location.
3. Verify all work tools and equipment are properly secured, or tethered as per the local safety regulations and Pre-installation Checklist.
4. Verify all components of the Speed Fan Assembly are securely connected and in good condition.
5. Uninstall all Speed Fan Bottom Shoes, slide each up and tie wire to Frame Main Leg.
6. Verify the Lifting Device is fully assembled, bolts tightened, and all components are in good condition.
7. Verify the hoist mechanism, and cable are in good condition and that the spooling is even and taut
8. Verify the Lifting Beam is in good condition.
9. Verify the Lifting Device is tethered to building.
10. Position the Lifting Device 1.2m (4'-0") from the slab edge, centered between Speed Fan Frames.
11. Drill the shear pin hole into the slab through the Lifting Device rear plate.
12. Install shear pin through the Lifting Device rear plate hole and fully into the slab. Install and tighten compression post on top of rear plate. (See Speed Fan Manual for approved shear pin and compression post options).
13. Securely fasten the Lifting Device hook to the Lifting Beam lift lug and verify the load line is taut.
14. De-installation worker to confirm by radio that de-installation level is clear and prepared to climb.
15. Re-installation worker to extend the Lifting Device boom away from the slab edge and lower Lifting Beam down to the de-installation level, then retract the Lifting Device boom until De-installation worker confirms the Lifting Beam has been received.
16. Hook and secure the Lifting Beam hooks to the Speed Fan Frame pick points.
17. Close the Speed Fan, tether the outer tube to the Lifting Beam lug and verify that the Speed Fan cannot open.
18. De-installation worker to confirm by radio that the Lifting Beam is secured fully to the Speed Fan and direct the raising of the Lifting Device cable until taut.
19. De-installation worker to remove anchors from the Speed Fan Top Shoe and notify Re-installation worker when ready to lift.
20. Re-installation Worker extends the Lifting Device boom to move the Speed Fan away from the slab edge and begin lifting to the re-installation level.
21. All workers visually monitor the Speed Fan while lifting and stop lifting in the event of any problems.
22. Once the Speed Fan Top Shoe rises above the re-installation floor, the Lifting Device is boomed in as far as possible to bring the Speed Fan Frames into contact with the slab edge.
23. While the Lifting Beam is taglined towards the building, the Lifting Device is lowered slowly until the Top Shoes are contacting the top of slab. The load line must support the Speed Fan.
24. Re-installation worker drills and installs anchor in each Top Shoe (see manufacturer installation instructions).
25. After anchors are installed and verified to be secure, the Lifting Device can lower the Lifting Beam and be disconnected from Speed Fan.
26. Repeat Steps 1-25 for each Upper Speed Fan unit until all Upper units are climbed to new level.

ATTENTION:
The contractor can, at their sole discretion, use a tower or mobile crane to lift the Speed Fan. All rigging and procedures are the responsibility of the contractor to assess and implement.

CLIMBING PROCEDURE (CONT'D)

27. Workers to go to level below re-installation level and untie and position all Bottom Shoes.
28. If floor-to-floor height is different than previous installation level, tether the Extension Leg to the building, hold the leg firmly while the adjustment bolt is removed, the leg length is adjusted to the appropriate length, and the adjustment bolt is reinstalled. Tether can be removed only after the Extension Leg is secured to the Main Leg.
29. Drill and install anchors in all bottom shoes (see manufacturer installation instructions).

CLIMB FRAME ASSEMBLIES FOR LOWER NETS

30. Repeat steps 1-29 for all Lower Speed Fan units.

RELEASE FANS (LOWER NETS)

31. While ensuring the Speed Fan pull rope is secured to the Speed Fan.
32. Using the pull rope, slowly lower Speed Fan until it is fully extended
33. Repeat Steps 31-32 until all Lower Nets are open.

RELEASE FANS (UPPER NETS)

34. Repeat Steps 31-33 until all Upper Nets are open.

RELEASE WIND LOCKS

35. Pivot all Wind Locks down until each stop in the resting position.

SECURE BOTTOM SHOES

36. Workers go to floor below main installation level, untie tie-wire restraining Bottom Shoe from sliding along Frame Leg.
37. If floor-to-floor height is different than previous installation level, tether the Extension Leg to the building, hold the leg firmly while the adjustment bolt is removed, the leg length is adjusted to the appropriate length, and the adjustment bolt is reinstalled. Tether can be removed only after the Extension Leg is secured to the Main Leg.
38. Position the Bottom Shoe on the slab, then drill and install anchor (see manufacturer instructions for anchor installation procedure).
39. Repeat Steps 36-38 until all Bottom Shoes are secured.

PRE-CLIMB CHECKLIST

ATTENTION:
The Procedures and Checklists are supplementary to all health and safety regulations. All work must be in conformance with all applicable local health and safety laws, regulations and standards. All fall protection requirements are to be followed in accordance with local requirements.

SITE ORIENTATION

- ☐ Workers climbing the Speed Fan system are to be trained and have read and understand all the manufacturer's instructions.
- ☐ Workers have been given a site-specific orientation by the General Contractor and have been made aware of any site-specific safety requirements and procedures.
- ☐ General Contractor and Crane Operator have been notified of the climbing areas of the Speed Fan.
- ☐ Workers have conducted a hazard assessment of the de-installation and re-installation locations.
- ☐ Top of the slab to top of the slab is measured from the installation level to floor below.
- ☐ Fall arrest anchorages are available for each installation worker to tie off to during installation.

CLIMBING AREA PREPARATION

- ☐ De-installation and re-installation areas are to be cordoned off with red DANGER tape with signage for fall hazard.
- ☐ Ground floor area below installation area is secured with CAUTION DO NOT ENTER tape and DANGER: SPEED FAN INSTALLATION ABOVE sign is posted at all access points.
- ☐ Re-installation area is cleared of all debris, garbage or small equipment that could fall off the building once fence system is removed.
- ☐ Shop Drawings are reviewed for installation requirements and dimensions confirmed.
- ☐ Edge protection guardrail system is removed and stored safely until re-installation after Speed Fan installation is complete. Fall protection required.
- ☐ The slab edge is measured and marked with frame anchor locations. "Upper" or "Lower" frame position is labelled.
- ☐ Hazards, interferences, and unique conditions are noted and addressed in Shop Drawings and/or by an Engineer.
- ☐ All props and nearby equipment that are not able to be removed from the installation area are to be inspected and secured in place or is temporarily tethered during installation.

EQUIPMENT PREPARATION

- ☐ Assemble the Lifting Device on the floor to which the Speed Fan will be climbed to.
- ☐ Inspect the lift cable and hook for improper spooling, wear or damage of any kind – remove from service if damaged.
- ☐ Verify the power source is available and accessible for all climbing areas.
- ☐ Verify radio contact between workers on the de-installation floor and the re-installation floor.
- ☐ Verify the Speed Fan is clear and free of any debris, is fully closed and secured.
- ☐ Verify tether is secured to outer net tube and to Lifting Beam lug, and that Speed Fan cannot open prior to lifting.
- ☐ All tether lines and PPE are inspected and are verified to be in good working condition.
- ☐ Confirm floor-to-floor height is the same for the re-installation floor. If the height has changed, adjust the extension leg to accommodate the floor-to-floor measurement plus 200mm (8") from the Top Shoe. The extension leg must be tethered to the building while adjustment is made.

PRE-CLIMB CHECKLIST (CONT'D)

ATTENTION:
The Procedures and Checklists are supplementary to all health and safety regulations. All work must be in conformance with all applicable local health and safety laws, regulations and standards. All fall protection requirements are to be followed in accordance with local requirements.

DURING CLIMBING

- ☐ All Bottom Shoes are disconnected from structure and tie-wired to the bottom of the Frame Main Leg.
- ☐ All installation workers are wearing personal fall protection equipment meeting the requirements of the local jurisdiction.
- ☐ All workers hard hats are tethered to the worker's harness or secured with a chin strap.
- ☐ All power tools and hand tools are tethered with approved tether lines.
- ☐ Verify Lifting Device is tethered to building structure.
- ☐ Min. 2 workers are required to perform climb.
- ☐ All site-specific safety rules and regulations are followed and respected.
- ☐ De-installation and re-installation workers remain in consistent radio contact throughout lift.
- ☐ Verify shear pin is installed properly with full embedment in slab (see manufacturer instructions for proper installation of shear pin for Lifting Device).
- ☐ Verify compression post is securely installed and bearing on rear plate of Lift Device
- ☐ Verify the Lift Device cable is hooked securely to the Lifting Beam before lowering
- ☐ Verify the Lifting Beam hooks fasten securely to each of the Speed Fan Frame pick points
- ☐ Ensure visual contact with Speed Fan throughout lifting process and suspend lifting if:
  - ☐ Speed Fan displays unbalanced, or jerky movement
  - ☐ Wind is pulling Speed Fan away from building
  - ☐ Hoist ceases to retract cable properly
  - ☐ Irregularities in the functioning or damage to any of the lifting and Speed Fan components are noticed
  - ☐ Radio contact is lost between de-installation and re-installation workers
- ☐ Resolve any problems prior to proceeding

DISMANTLING

DISTMANTLING PROCEDURE

DISMANTLE UPPER NETS

1. Workers to pre-assemble all tools required to uninstall the Speed Fan Frame Assembly at the slab edge adjacent to the Frame de-installation location.
2. Verify all works tools and equipment are properly secured, or tethered as per the local safety regulations and De-installation Checklist.
3. Verify all components of the Speed Fan Assembly are securely connected and in good condition.
4. Uninstall all Speed Fan Bottom Shoes, slide each up and tie wire to Frame Main Leg.
5. Verify that each Speed Fan is closed, the outer tube is tethered to the building or a worker (Spotter) to hold the tether taut away from the slab edge.
6. Worker (Placer) opens the tube clamp on each Frame Leg and lifts the inner net tube onto the slab.
7. Placer wraps chain around Diagonal Brace and secures chain back to Frame Leg pick point on each Frame Assembly
8. Loosen the tether on the outer tube and verify the chains are secure and that the Speed Fan cannot open.
9. With Spotter holding the outer tube in place, the Placer opens each of the tube clamps.
10. Placer and Spotter lift the outer tube together and lower onto slab.
11. The net assembly is rolled up and tied up for removal.
12. For each Frame assembly, secure a tether from the Frame Leg pick point to the building or the Spotter to hold the tether taut away from the slab edge.
13. The Placer holds the Frame Leg and removes the anchor from the Top Shoe
14. The Placer lifts the Frame assembly, slides it into the building and lays on the slab perpendicular to the slab edge.

DISMANTLE LOWER NETS

15. Repeat steps 1-14 for all Lower Speed Fan units.

ATTENTION:
The contractor can, at their sole discretion, use a tower or mobile crane to lift and dismantle Speed Fans. All rigging and procedures are the responsibility of the contractor to assess and implement.

DISMANTLING

DISMANTLING CHECKLIST

ATTENTION:
The Procedures and Checklists are supplementary to all health and safety regulations. All work must be in conformance with all applicable local health and safety laws, regulations and standards. All fall protection requirements are to be followed in accordance with local requirements.

SITE ORIENTATION

- ☐ Workers working with the Speed Fan system are to be trained and have read and understand all the manufacturer's instructions.
- ☐ Workers have been given a site-specific orientation by the General Contractor and have been made aware of any site-specific safety requirements and procedures.
- ☐ General Contractor and Crane Operator have been notified of the dismantling areas of the Speed Fan.
- ☐ Workers have conducted a hazard assessment of the dismantling locations.
- ☐ Fall arrest anchorages are available for each dismantling worker to tie off to during dismantling.

DISMANTLING AREA PREPARATION

- ☐ Dismantling areas are to be cordoned off with red DANGER tape with signage for fall hazard.
- ☐ Ground floor area below dismantling area is secured with CAUTION DO NOT ENTER tape and DANGER: SPEED FAN INSTALLATION ABOVE sign is posted at all access points.
- ☐ Dismantling area is cleared of all debris, garbage or small equipment that could fall off the building once fence system is removed.
- ☐ Edge protection guardrail system is removed and stored safely until re-installation after Speed Fan dismantling is complete. Fall protection required.
- ☐ Hazards, interferences, and unique conditions are noted and addressed in Shop Drawings and/or by an Engineer.
- ☐ All props and nearby equipment that are not able to be removed from the dismantling area are to be inspected and secured in place or are temporarily tethered during dismantling.

EQUIPMENT PREPARATION

- ☐ Verify the Speed Fan is clear and free of any debris, is fully closed and secured.
- ☐ All tether lines and PPE are inspected and are verified to be in good working condition.

DURING DISMANTLING

- ☐ All Bottom Shoes are disconnected from structure and tie-wired to the bottom of the Frame Main Leg.
- ☐ All dismantling workers are wearing personal fall protection equipment meeting the requirements of the local jurisdiction.
- ☐ All workers hard hats are tethered to the worker's harness or secured with a chin strap.
- ☐ All power tools and hand tools are tethered with approved tether lines.
- ☐ Min. 2 workers are required to perform dismantling operation.
- ☐ All site-specific safety rules and regulations are followed and respected.
- ☐ Verify tether is secured to outer net tube and to building or held taut away from slab by worker until Diagonal Braces are secured closed with chain.

INSPECTION

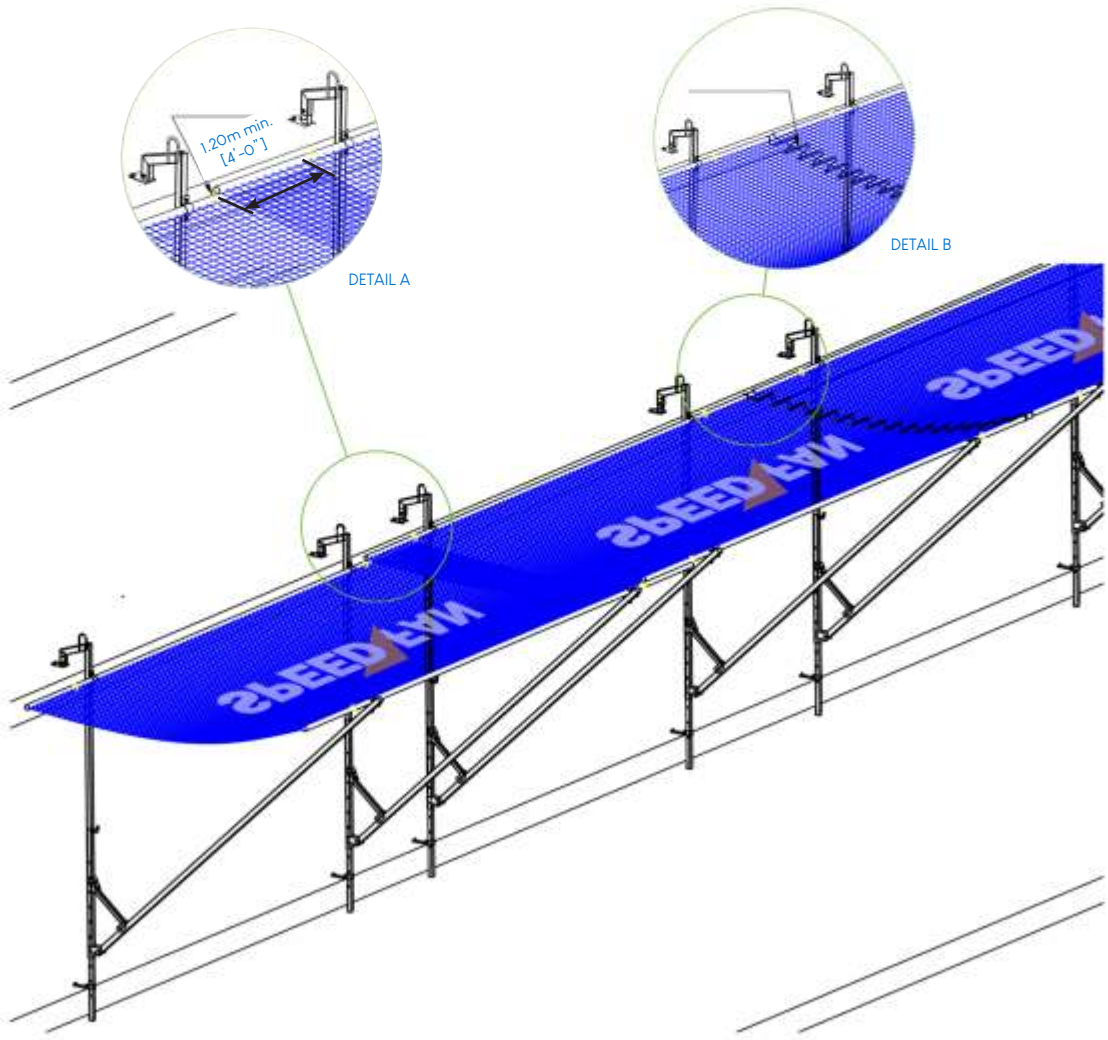
WEEKLY CHECKLIST

ATTENTION:
The Procedures and Checklists are supplementary to all health and safety regulations. All work must be in conformance with all applicable local health and safety laws, regulations and standards. All fall protection requirements are to be followed in accordance with local requirements.

SYSTEM VERIFICATION

- ☐ Verify all anchors are snug, in good condition and free from tampering.
- ☐ Verify all scaffold tube clamps are secured and the scaffold tube is unable to move freely.
- ☐ Verify all Speed Fan Frame bolted connections are secure and free from damage or tampering.
- ☐ Verify all Speed Fan Frame structural elements are in good condition and free from any visible damage or deformation.
- ☐ Carefully, remove all debris or objects from the netting.
- ☐ Verify no visible damage to coarse or fine debris nets.

SPEED FAN OVERLAPS



PREFERRED OPTION

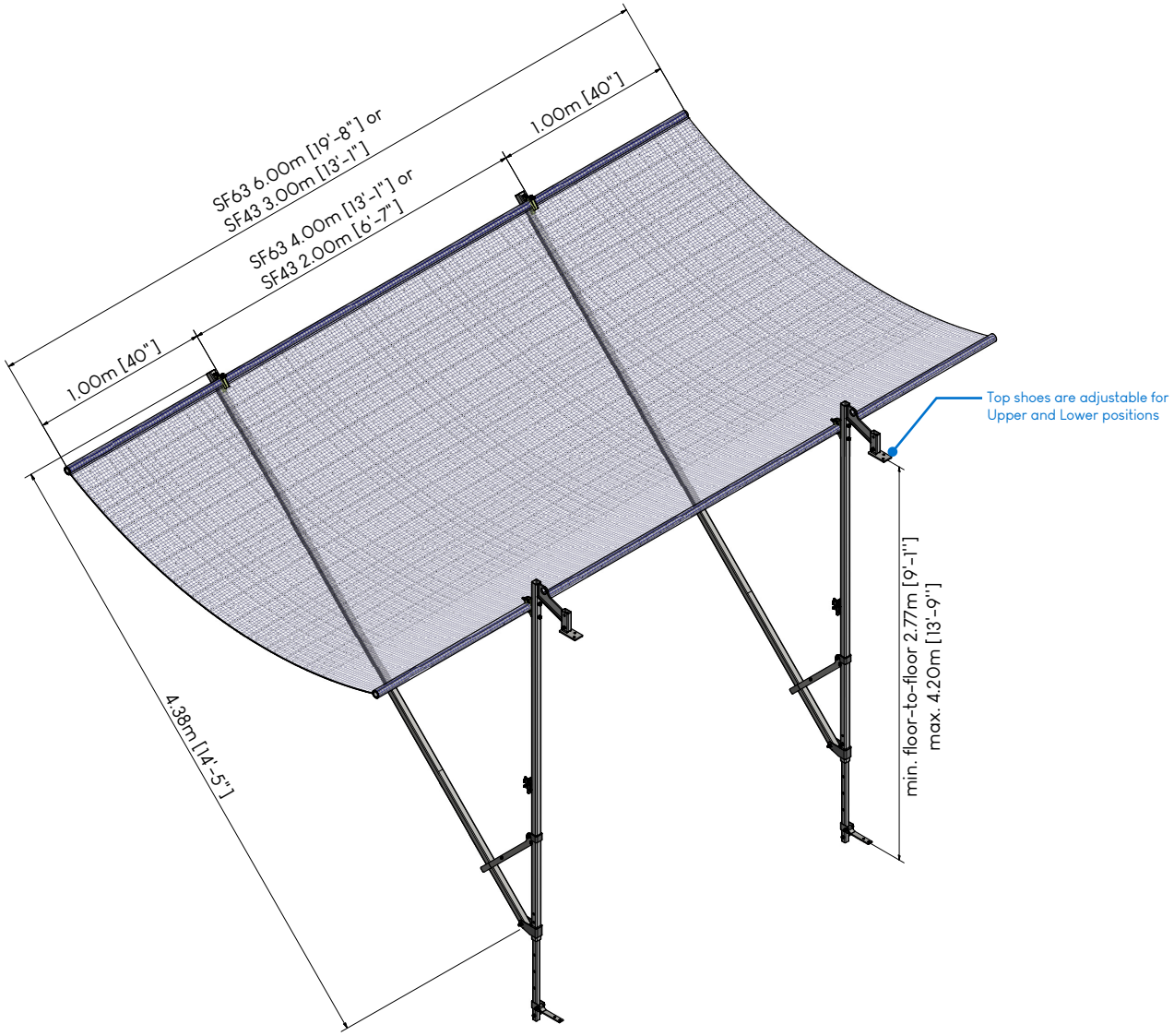
- Adjacent Speed Fan must overlap no less than 4'-0" (1.20m) at the narrowest point of overlap. (Detail A)

ALTERNATIVE OPTION

- Adjacent Speed Fan nets can be joined by lacing using coupling ropes with a minimum tensile strength of 7.5 kN (1686 lbf). Coupling rope shall be laced throughg each mesh and secured at each end, ensuring that gaps greatre than 4" (100mm) do not develop between the edges of each net. (Detail B)

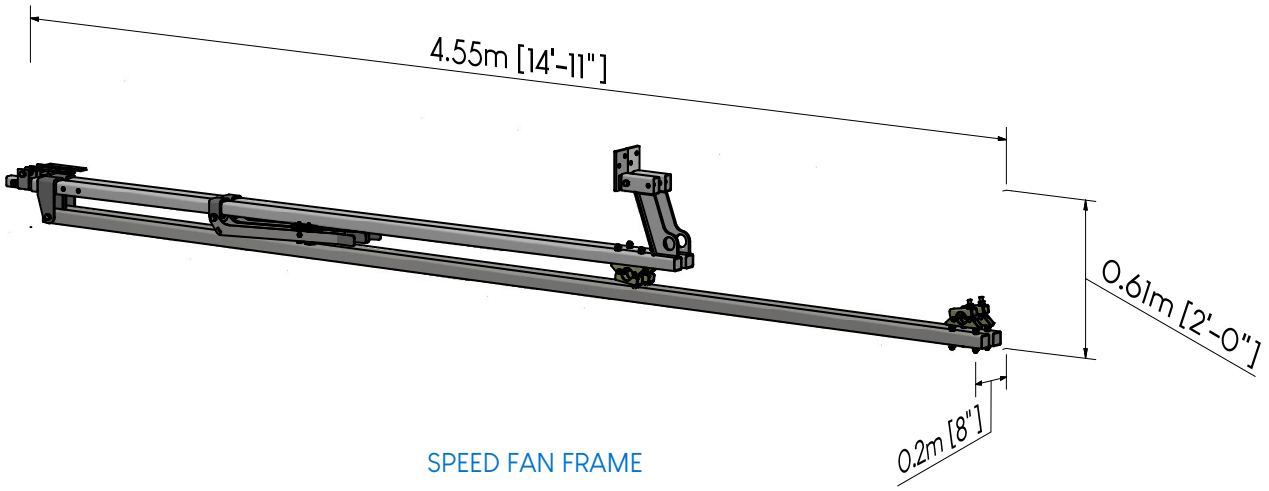
DIMENSIONS

ASSEMBLY DURING USE

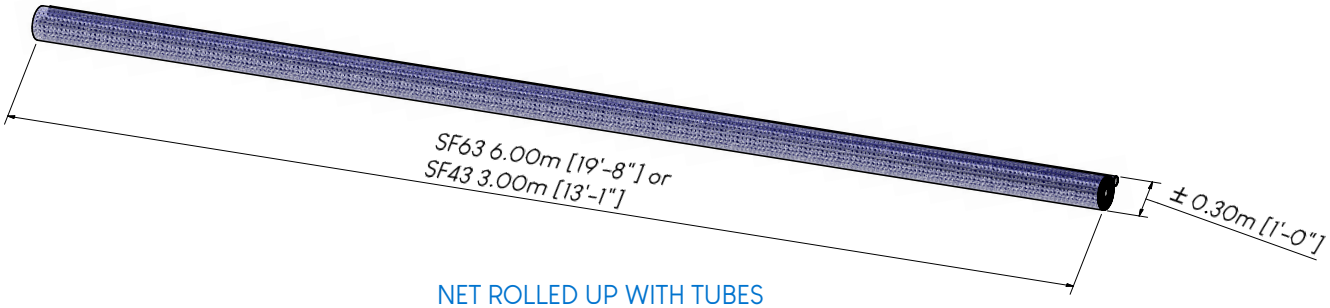


ASSEMBLED DIMENSIONS

PACKING DIMENSIONS



SPEED FAN FRAME



NET ROLLED UP WITH TUBES

Accessorles included with the Speed Fan

SPEEDFAN

SPEEDFAN

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