

NORTHERN STRANDS

Canadian owned and operated since 1970



SUSPENDED ACCESS USER GUIDE

northernstrands.com

SUSPENDED ACCESS SYSTEMS OVERVIEW

NORTHERN STRANDS HAS THE LARGEST RENTAL FLEET OF SUSPENDED ACCESS EQUIPMENT IN SASKATCHEWAN, OPERATING ACROSS WESTERN CANADA AND ONTARIO.

TRAINED, COMPETENT SUSPENDED ACCESS TECHNICIANS ARE AVAILABLE TO INSTALL, MOVE AND/OR TAKE DOWN SUSPENDED ACCESS EQUIPMENT.

SUSPENDED ACCESS TRAINING IS AVAILABLE FOR END USERS ON HOW TO INSTALL, MOVE, OPERATE AND TAKE DOWN THE EQUIPMENT SAFELY AND EFFICIENTLY.

NORTHERN STRANDS RECOMMENDS
PERFORMING DOCUMENTED INSPECTIONS
OF ALL SUSPENDED ACCESS EQUIPMENT.

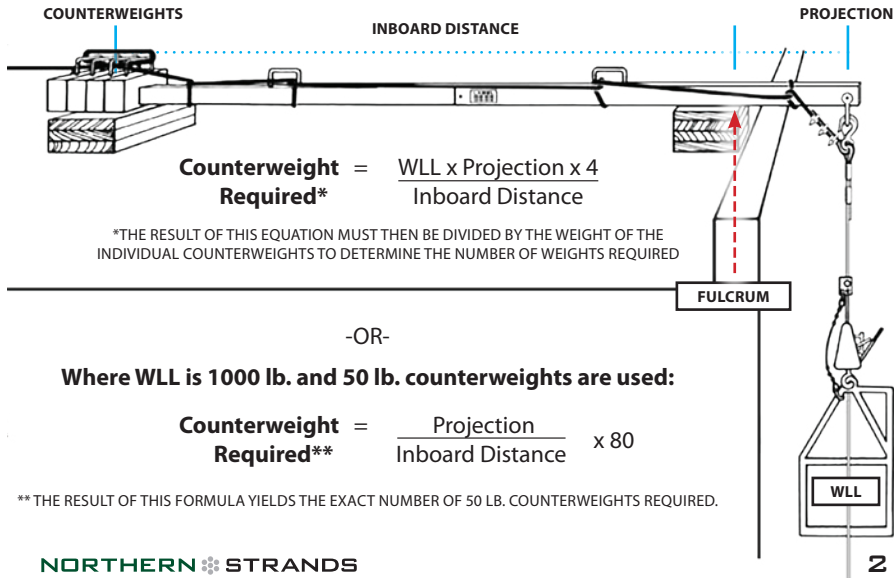
DEFINITIONS:

WORKING LOAD LIMIT: THE MAX WEIGHT A STAGE OR COMPONENT IS PERMITTED TO SUPPORT.

REACH: (ALSO OUTREACH OR PROJECTION) CAN BE THE DISTANCE FROM THE SUSPENSION POINT OF A BEAM TO EITHER THE CLOSEST POINT OF CONTACT WITH THE BUILDING OR THE BUILDING FACE DEPENDING ON CONTEXT.

FULCRUM: THE POINT AROUND WHICH A BEAM WOULD ROTATE WHEN THE OUTBOARD END IS PULLED DOWN.

TIEBACK: CABLE TO SECURE BEAM COMPONENTS & PREVENT ANY FORWARD MOVEMENT



IN THE FOLLOWING CHARTS, "REACH" IS MEASURED FROM THE SUSPENSION POINT OF THE SUSPENSION CABLE, BACK TO THE FIRST POINT OF CONTACT WITH THE BUILDING OR STRUCTURE. REACH IS ALSO COMMONLY REFERRED TO AS PROJECTION, OUTREACH, THRUST-OUT, OR OVERHANG AMONG OTHER TERMS.

IF THE BEAM MUST BE INSTALLED SO THAT IT IS NOT PERPENDICULAR TO THE BUILDING/ROOF EDGE, USE THE LONGEST MEASUREMENT FROM THE TIPPING POINT (FULCRUM) TO THE HANGING POINT TO DETERMINE REACH.

COUNTERWEIGHT REQUIREMENT AT SAMPLE REACHES

REACH:	12"	24"	36"	46"
1000 LB. LOAD 2 PC. – 16' BEAM	6 WEIGHTS	12 WEIGHTS	20 WEIGHTS	29 WEIGHTS
1500 LB. LOAD 2 PC. – 16' BEAM	9 WEIGHTS	18 WEIGHTS	NA	NA
1000 LB. LOAD 3 PC. – 24' BEAM	4 WEIGHTS	8 WEIGHTS	12 WEIGHTS	17 WEIGHTS
1500 LB. LOAD 3 PC. – 24' BEAM	6 WEIGHTS	12 WEIGHTS	NA	NA

* COUNTERWEIGHTS WEIGH 50 LBS. EACH.

*NOTE: FOR REACHES OTHER THAN THOSE LISTED, USE THE NEXT HIGHEST REACH, OR USE THE COUNTERWEIGHT FORMULA.

PLATFORM GENERAL ASSEMBLY GUIDELINES

1. CONFIRM THAT FALL PROTECTION PLAN, JOB-HAZARD AND/OR FIELD LEVEL HAZARD ASSESSMENTS HAVE BEEN COMPLETED AND THAT ALL COMPONENTS HAVE BEEN INSPECTED THOROUGHLY BY A COMPETENT PERSON BEFORE ASSEMBLY.
2. INSTALL BARRICADES/DELINEATION TO PREVENT OTHERS FROM WORKING ABOVE/BELOW WHILE ASSEMBLING THE PLATFORM, OUTRIGGER BEAMS, AND OTHER RIGGING.
3. ASSEMBLE STAGE COMPONENTS DIRECTLY BELOW THE WORK AREA WHENEVER POSSIBLE.
4. START BY CONNECTING ONE END STIRRUP OR END BARRIER TO THE TRUSS RAILS USING MODULAR PINS. ALWAYS INSTALL MODULAR PINS IN SUCH A WAY THAT THEIR KEEPERS CAN BE EASILY INSPECTED FROM OUTSIDE THE STAGE BEFORE USE (USUALLY FROM THE INSIDE OUT).
5. INSTALL TRUSS RAILS WITH THE FLAT PART OF THE TOEBOARD FACING THE OUTSIDE OF THE STAGE.
6. WHERE STAGES LONGER THAN 3M/10' ARE REQUIRED, A WALK-THROUGH FRAME IS CONNECTED TO THE TRUSS RAILS OPPOSITE THE END BARRIER/STIRRUP, ALLOWING ANOTHER SET OF TRUSS RAILS TO BE CONNECTED TO IT. INSTALL THE PINS CORRECTLY (FROM THE INSIDE OUT).
7. ONCE ENOUGH TRUSS RAILS AND WALK-THROUGH FRAMES HAVE BEEN PINNED TOGETHER TO REACH THE DESIRED LENGTH OF STAGE, INSTALL ANOTHER END-STIRRUP OR END-BARRIER ON THE LAST SET OF TRUSSES TO COMPLETE THE BASIC PLATFORM.
8. WHERE END BARRIERS AND WALK-THROUGH STIRRUPS (CRADLE STIRRUPS) ARE USED, THE PLATFORM SUPPORTS OF THE STIRRUPS SIT UNDER THE TRUSS RAILS AT EACH END OF THE PLATFORM. MANUFACTURER'S RECOMMENDATIONS GENERALLY PROHIBIT MORE THAN 1M/3' OF OVERHANG PAST THE STIRRUP ON PLATFORMS UP TO 14M/46' IN OVERALL LENGTH, AND 2M/6.7' ON PLATFORMS GREATER THAN 14M/46' LONG.

PLATFORM GENERAL ASSEMBLY GUIDELINES (CONT.)

9. WALK-THROUGH STIRRUPS MUST BE FASTENED TO THE TRUSS RAIL ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. TWO 7/16" BOLTS (5/8" CAP) AND A CLAMP PLATE ARE USED TO STRADDLE THE TRUSS RAIL ON EACH SIDE OF THE STIRRUP; TIGHTEN EACH BOLT UNTIL SNUG (DO NOT OVERTIGHTEN) AND ENSURE THAT THERE IS A WASHER BETWEEN THE NUT/BOLT-HEAD AND THE STRUCTURE OF THE WALK-THROUGH STIRRUP.
10. INSTALL HANDRAIL POSTS AND HANDRAILS. HANDRAIL POSTS INSTALL AT EVERY END-STIRRUP/BARRIER AND WALK-THROUGH FRAME. BEST RESULTS ARE ACHIEVED BY INSTALLING ALL HANDRAIL POSTS TO THE SAME HEIGHT TO ALLOW FOR EASIER INSTALLATION OF THE HANDRAIL TUBES.
11. INSTALL WALL ROLLERS (IF APPLICABLE), AS PER MANUFACTURER'S INSTRUCTIONS. TYPICALLY, WALL ROLLERS WILL CLAMP TO THE TOEBOARD OF THE PLATFORM USING THREADED T-BOLTS.
12. ATTACH A T-YOKE (SPLITTER) TO THE MID-POINT BETWEEN THE STIRRUPS ON THE STAGE WITH EACH RECEPTACLE EXTENDING OUT TO EACH END OF THE STAGE.

OUTRIGGER BEAM GENERAL ASSEMBLY GUIDELINES

1. WHEN POSSIBLE, DETERMINE OUTRIGGER BEAM SPACING BY MEASURING THE CENTRE-TO-CENTRE DISTANCE OF THE STIRRUPS ON THE PLATFORM.
2. DETERMINE REQUIRED PROJECTION PAST FACE OF STRUCTURE: MEASURE FROM TOEBOARD TO OUTERMOST POINT OF ANY ATTACHMENTS/ROLLERS ON THE BUILDING-FACE SIDE OF THE STAGE AND ADD HALF THE STAGE'S WIDTH. ADD LENGTH FOR OBSTRUCTIONS OR SUBTRACT FOR ANGULATED ROPING.
3. GO TO ROOF AND ASSEMBLE THE OUTRIGGER BEAM SECTIONS, STAYING WELL AWAY FROM THE ROOF EDGE. (3-6M (10-20') OR MORE WHERE POSSIBLE).
4. ONCE THE BEAM SECTIONS ARE PUT TOGETHER, SET THEM UP WITH BLOCKS OR OTHER DUNNAGE UNDER EACH END.
5. INSTALL THE T-SECTION AND ONE COUNTERWEIGHT AT THE BACK/INBOARD END OF THE BEAM.
6. INSTALL ONE END OF A COIL OF TIEBACK CABLE THROUGH THE EYE OF THE SUSPENSION LINE WITH 3 DOUBLE SADDLE CLIPS, 10" OF TURNBACK, AND 30 FT-LBS OF TORQUE.
7. ATTACH THE SUSPENSION LINE TO THE OUTBOARD END OF THE BEAM AND WALK IT OUT ON THE ROOF IN A ZIGZAG PATTERN.
8. HALF-HITCH TIEBACK AROUND THE OUTBOARD END OF THE BEAM, BEFORE AND AFTER EACH BEAM SPLICE, AND THE INBOARD END OF THE BEAM.
9. WALK THE TIEBACK CABLE OUT ON THE ROOF IF NECESSARY; DO NOT WALK IT OUT ON TOP OF THE SUSPENSION LINE.
10. MEASURE BACK FROM THE CENTRE OF THE SUSPENSION POINT AND MARK THE BEAM WITH THE PROJECTION MEASUREMENT.
11. USING FALL PROTECTION, PROJECT BEAM OUT ABOVE A STIRRUP AND ALIGN PROJECTION MARK WITH OUTERMOST EDGE OF STRUCTURE.
12. IF OUTERMOST CONTACT POINT OF BEAM IS INBOARD OF PROJECTION MARK, THIS CONTACT POINT IS USED TO DETERMINE COUNTERWEIGHTING.

OUTRIGGER BEAM GENERAL ASSEMBLY GUIDELINES (CONT.)

13. USE BEAM LABEL AND/OR COUNTERWEIGHT FORMULA TO DETERMINE COUNTERWEIGHT REQUIRED FOR PROJECTION PAST TIPPING POINT.
 14. ENSURE BEAM IS ALIGNED WITH A SECURE, 22.2KN ANCHOR. BEAM MUST BE PERPENDICULAR TO ROOF EDGE OR SECURED AT FRONT. WHEN USING EXCESSIVE ANGULATED ROPING, ADDITIONAL MEASURES MAY BE NEEDED TO PREVENT BEAM ROTATION AS STAGE NEARS TOP OF TRAVEL.
 15. WHEN POSSIBLE, RAISE THE REAR OF BEAM WITH DUNNAGE TO LEVEL IT WITH THE FRONT AND MOVE THE FULCRUM FORWARD TO GIVE COUNTERWEIGHTS MORE MECHANICAL ADVANTAGE; NEVER ALLOW THE REAR OF THE BEAM TO BE HIGHER THAN THE FRONT.
 16. PLACE PLYWOOD, BOARDS, STYROFOAM, OR OTHER MATERIAL BENEATH THE COUNTERWEIGHT OR DUNNAGE BEFORE ADDING MORE WEIGHTS TO PROTECT THE ROOFING MATERIAL FROM BEING DAMAGED BY THE WEIGHT.
 17. INSTALL THE REMAINING REQUIRED NUMBER OF COUNTERWEIGHTS.
 18. LOWER THE SUSPENSION LINE; BE MINDFUL OF BODY POSITIONING.
 19. TIGHTEN UP THE HALF HITCHES IN THE TIEBACK TAKING CARE NOT TO PULL THE SUSPENSION LINE OFF OF HANGING STRAIGHT VERTICAL.
 20. RUN THE TIEBACK THROUGH THE COUNTERWEIGHTS IN SUCH A WAY THAT IT WILL STILL POINT STRAIGHT BACK TO A SECURE TIEBACK ANCHOR.
- REPEAT STEPS 3-20 FOR THE REMAINING OUTRIGGER BEAM(S) AND ENSURE THE HANGING POINTS ARE AS FAR APART AS THE STIRRUPS ON THE STAGE.*
- ONCE ALL STAGE AND OUTRIGGER BEAMS HAVE BEEN COMPLETELY ASSEMBLED, COMPLETE A DOCUMENTED INSPECTION OF ALL COMPONENTS PRIOR TO USE.

GENERAL OPERATING PROCEDURE

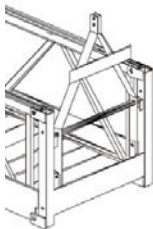
1. CONFIRM FALL PROTECTION PLAN AND HAZARD ASSESSMENTS ARE COMPLETE, AND ALL PPE HAS BEEN INSPECTED AND IS APPROVED FOR USE.
2. ENSURE BARRICADES/DELINEATION ARE INSTALLED WHERE POSSIBLE TO PREVENT OTHERS FROM WORKING ABOVE/BELOW PLATFORM.
3. ONLY COMPETENT OPERATORS (EXPERIENCED, KNOWLEDGEABLE AND TRAINED) ARE TO OPERATE THE SWING STAGE.
4. SUPPLY POWER TO MAIN ELECTRICAL CABLE BY PLUGGING IT IN AT THE PANEL.
5. PERFORM PRE-USE INSPECTION OF THE PLATFORM COMPONENTS AND CLIMBERS, ENSURING ALL PINS ARE IN PLACE AND FASTENERS ARE SECURE.
6. VERIFY TOTAL WEIGHT OF OCCUPANTS + MATERIALS WILL NOT EXCEED WLL OF THE LOWEST RATED PART OF THE SUSPENSION SYSTEM.
7. ATTACH INDIVIDUAL LANYARD/ROPE GRAB TO INDIVIDUAL LIFELINE AND DORSAL D-RING OF HARNESS PRIOR TO ENTERING STAGE. 100% TIE OFF!
8. IF TOP RAIL OF STAGE IS TOO DIFFICULT TO CLIMB OVER, ATTACH ROPE GRAB/LANYARD TO VERTICAL LIFELINE, RUN IT BETWEEN THE TOP AND MID RAILS FROM INSIDE OF THE STAGE BEFORE CONNECTING TO D-RING AND THEN BOARD STAGE BETWEEN THE TOP AND MID RAILS.
9. ONCE ABOARD THE STAGE, HAVE EACH OPERATOR POSITION THEMSELVES NEXT TO EACH CLIMBER.
10. HOLD LANYARD OVER ONE SHOULDER WITH ONE HAND AND USE THE OPPOSITE HAND TO FUNCTION THE CLIMBER CONTROLS.
11. ONCE IN POSITION, OPERATORS MUST COORDINATE WITH EACH OTHER BEFORE MOVING THE STAGE UP OR DOWN.
12. PULL THE EMERGENCY STOP SWITCHES ON EACH CLIMBER PRIOR TO OPERATING TO ENABLE UP/ DOWN MOVEMENT.
13. IF ASCENT IS REQUIRED, PRESS, AND HOLD THE ↑ ARROW BUTTON TO CLIMB, AND VICE VERSA FOR DESCENT USING THE ↓ ARROW BUTTON.

GENERAL OPERATING PROCEDURE (CONT.)

14. WHEN MOVING THE STAGE, EACH OPERATOR MUST STAY ALERT FOR OBSTRUCTIONS/OBSTACLES THAT MAY CONTACT THE STAGE.
15. IF AN OBSTRUCTION IS ENCOUNTERED, STOP TRAVEL, ADVANCE ROPE GRABS ALONG THE LIFELINE IN THE DIRECTION OF TRAVEL TO FREE UP A HAND TO PUSH OFF FROM STRUCTURE WHILE USING THE OTHER TO CONTROL THE CLIMBER AND ALLOW THE STAGE TO CLEAR THE OBSTACLE.
16. THE STAGE MAY HAVE TO BE STOPPED AND RESTED AGAINST TALL OBSTACLES TO ALLOW REPOSITIONING OF THE GRABS. AUTOMATIC ROPE GRABS WITH INTEGRAL 0.76M/2.5' LANYARDS CAN TRAIL USERS IF THERE IS ADEQUATE LIFELINE TENSION AND NO SLACK CAN DEVELOP ABOVE THE GRAB.
17. ONCE THE STAGE IS IN POSITION, DEPRESS THE EMERGENCY STOP ON EACH CLIMBER TO ENSURE THE STAGE CANNOT MOVE UNINTENTIONALLY.
18. RECOMMENDED TO SECURE STAGE TO STRUCTURE USING ROPES (NOT LIFELINES), OR TIE IN EQUIPMENT. REMOVE TIE-INS BEFORE MOVING.
19. WHEN LOWERING STAGE TO LAND, STOP 0.3M/1' BEFORE LANDING, DO A CIRCLE CHECK TO ENSURE LIFELINES, POWER CORDS, ETC. ARE CLEAR.
20. ONCE UNOBSTRUCTED LANDING AREA IS CONFIRMED, LAND THE STAGE. PARK A-FRAMES (IF APPLICABLE) TO PREVENT THEM TIPPING OVER.
21. LEAVE ADEQUATE TENSION IN THE SUSPENSION LINES TO ENSURE THEY CANNOT WHIP AGAINST THE BUILDING/STRUCTURE.
22. ONCE ON THE GROUND, DEPRESS THE EMERGENCY STOP BUTTON, DISMOUNT THE STAGE, AND DISCONNECT FALL ARREST LANYARD.
23. IF LEAVING THE STAGE FOR EXTENDED PERIODS, DISCONNECT THE MAIN POWER CORD FROM THE ELECTRICAL PANEL; REMOVE THE LANYARDS FROM THE LIFELINES AND STORE THEM IN A SAFE PLACE.

ARRANGEMENT OF SUPERMOD PLATFORMS WITH END STIRRUPS

TOTAL LENGTH		PLATFORM ARRANGEMENT ↑ = END STIRRUP - = U FRAME	TOTAL PLATFORM WEIGHT		MAX RATED WORKING LOAD	
FT./IN	M		LBS.	KG.	LBS.	KG.
6'9"	2	↑ 2 ↑	240	110	1500	680
9'9"	3	↑ 3 ↑	282	129	1500	680
13'6"	4	↑ 2 - 2 ↑	358	163	1500	680
16'6"	5	↑ 3 - 2 ↑	400	182	1500	680
19'6"	6	↑ 3 - 3 ↑	440	201	1500	680
23'3"	7	↑ 2 - 3 - 2 ↑	518	236	1500	680
26'3"	8	↑ 3 - 2 - 3 ↑	560	255	1500	680
29'3"	9	↑ 3 - 3 - 3 ↑	602	274	1000	450
33'	10	↑ 3 - 2 - 2 - 3 ↑	678	309	1000	450
36'	11	↑ 3 - 2 - 3 - 3 ↑	720	328	1000	450
39'	12	↑ 3 - 3 - 3 - 3 ↑	762	347	1000	450
42'9"	13	↑ 3 - 3 - 2 - 2 - 3 ↑	838	381	750	340
45'9"	14	↑ 3 - 3 - 2 - 3 - 3 ↑	880	400	750	340
48'9"	15	↑ 3 - 3 - 3 - 3 - 3 ↑	922	420	750	340



TOTAL LENGTH: DISTANCE BETWEEN THE HOIST SUSPENSION CABLES ≈ TOTAL LENGTH OF PLATFORM

TOTAL PLATFORM WEIGHT: DEAD WEIGHT OF THE STAGE FOR THE SPECIFIC ARRANGEMENT

END STIRRUPS ARE INSTALLED ONLY AT THE ENDS OF THE STAGE

INTERMEDIATE SECTIONS OF THE STAGE ARE CONNECTED USING U-FRAMES

HAND RAILS AND FLOOR PANELS ARE SELECTED ACCORDING TO THE LENGTH OF THE TRUSS

ARRANGEMENT OF SUPERMOD PLATFORMS WITH WALK THROUGH (C) STIRRUPS

TOTAL LENGTH		1M STIRRUP SPACING (between hoist lines) Arrangement		PLATFORM ARRANGEMENT ↑ = END STIRRUP - = U FRAME	TOTAL PLATFORM WEIGHT		MAX RATED WORKING LOAD	
FT./IN	M	FT./IN	M		LBS.	KG.	LBS.	KG.
30'	9	23'3"	7	1 ↑ 2 - 3 - 2 ↑ 1	602	274	1000	450
33'9"	10	26'3"	8	1 ↑ 3 - 2 - 3 ↑ 1	644	293	1000	450
36'9"	11	29'3"	9	1 ↑ 3 - 3 - 3 ↑ 1	686	312	1000	450
40'6"	12	33'	10	1 ↑ 3 - 2 - 2 - 3 ↑ 1	762	347	1000	450
43'6"	13	36'	11	1 ↑ 3 - 3 - 3 - 2 ↑ 1	804	366	1000	450
46'6"	14	39'	12	1 ↑ 3 - 3 - 3 - 3 ↑ 1	846	385	750	340
50'3"	15	42'9"	13	1 ↑ 3 - 3 - 2 - 2 - 3 ↑ 1	922	420	750	340
53'3"	16	45'9"	14	1 ↑ 3 - 3 - 2 - 3 - 3 ↑ 1	964	439	750	340
56'3"	17	48'9"	15	1 ↑ 3 - 3 - 3 - 3 - 3 ↑ 1	1006	458	750	340

TOTAL LENGTH: TOTAL LENGTH OF SUSPENDED PLATFORM

STIRRUP SPACING: DISTANCE BETWEEN SUSPENSION CABLES WHEN STIRRUPS ARE INSTALLED EITHER 1M OR 2M FROM ENDS*

TOTAL PLATFORM WEIGHT: DEAD WEIGHT OF THE STAGE FOR THE SPECIFIC ARRANGEMENT

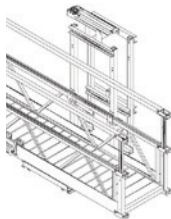
MAX RATED WORKING LOAD: MAXIMUM LIVE LOAD

U-FRAME WITH END GUARD RAILS IS INSTALLED AT THE ENDS OF THE PLATFORM

INTERMEDIATE SECTIONS OF THE STAGE ARE CONNECTED USING U-FRAMES

HANDRAILS AND FLOOR PANELS ARE SELECTED ACCORDING TO THE LENGTH OF THE TRUSS

*SUSPENSION LINES MUST BE NO MORE THAN 1M FROM THE ENDS OF THE STAGE ON PLATFORMS THAT ARE 14M OR LESS IN LENGTH.



ARRANGEMENT OF SUPERMOD PLATFORMS WITH WALK THROUGH (C) STIRRUPS (CONT.)

TOTAL LENGTH		2M STIRRUP SPACING (between hoist lines) Arrangement		PLATFORM ARRANGEMENT ↑ = END STIRRUP – = U FRAME	TOTAL PLATFORM WEIGHT		MAX RATED WORKING LOAD	
FT./IN	M	FT./IN	M		LBS.	KG.	LBS.	KG.
46'6"	14	33'	10	2 ↑ 3 – 2 – 2 – 3 ↑ 2	796	362	750	340
49'6"	15	36'	11	2 ↑ 3 – 3 – 3 – 2 ↑ 2	862	392	750	340
52'6"	16	39'	12	2 ↑ 3 – 3 – 3 – 3 ↑ 2	904	411	750	340
56'3"	17	42'9"	13	2 ↑ 3 – 3 – 2 – 2 – 3 ↑ 2	1082	492	750	340
59'3"	18	45'9"	14	2 ↑ 3 – 3 – 2 – 3 – 3 ↑ 2	1124	511	750	340
62'3"	19	48'9"	15	2 ↑ 3 – 3 – 3 – 3 – 3 ↑ 2	1166	530	750	340

TOTAL LENGTH: TOTAL LENGTH OF SUSPENDED PLATFORM

STIRRUP SPACING: DISTANCE BETWEEN SUSPENSION CABLES WHEN STIRRUPS ARE INSTALLED EITHER 1M OR 2M FROM ENDS*

TOTAL PLATFORM WEIGHT: DEAD WEIGHT OF THE STAGE FOR THE SPECIFIC ARRANGEMENT

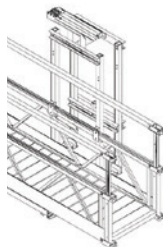
MAX RATED WORKING LOAD: MAXIMUM LIVE LOAD

U-FRAME WITH END GUARD RAILS IS INSTALLED AT THE ENDS OF THE PLATFORM

INTERMEDIATE SECTIONS OF THE STAGE ARE CONNECTED USING U-FRAMES

HANDRAILS AND FLOOR PANELS ARE SELECTED ACCORDING TO THE LENGTH OF THE TRUSS

*SUSPENSION LINES MUST BE NO MORE THAN 2M FROM THE ENDS OF THE STAGE ON PLATFORMS THAT ARE 14M OR LESS IN LENGTH.



INSPECTION ITEMS:

GENERAL

1. HAVE AREAS BELOW/AROUND THE STAGE BEEN ADEQUATELY BARRICADED/TAPED OFF?
2. ARE ALL TOOLS SECURED ON THE PLATFORM?
3. ARE OPERATORS TRAINED (INCLUDING FALL ARREST) AND FIT FOR DUTY?
4. HAVE ALL PERSONNEL REVIEWED AND SIGNED THE FALL PROTECTION/RESCUE PLAN?
5. HAS THE PLATFORM BEEN SET UP ACCORDING TO AN APPROVED DRAWING OR PLAN?

PLATFORM

6. ARE ALL CONNECTIONS SECURE & CHECKED (LYNCH PINS, MOD PINS, BOLTS/LOCK NUTS)?
7. ARE HANDRAILS INSTALLED ALL AROUND THE PLATFORM AND AT LEAST 36" HIGH?
8. IS THE PLATFORM CAPACITY CLEARLY LEGIBLE?
9. ARE STIRRUPS IN LINE WITH OUTRIGGERS OR SUSPENSION POINTS?
10. IS THE POWER CORD LONG ENOUGH?
11. DO SUSPENSION CABLES REACH THE GROUND OR A SAFE LANDING?
12. IS THE PLATFORM CLEAR OF POWERLINES OR OTHER HAZARDS?
13. IS THE FLOOR PANEL SECURE, SKID RESISTANT, AND CLEAR OF UNNECESSARY DEBRIS?

INSPECTION ITEMS (CONTINUED):

HOISTING EQUIPMENT

- 14. ARE THE MANUFACTURER'S OPERATING INSTRUCTIONS AVAILABLE AND UNDERSTOOD?
- 15. IS EACH HOIST OF ADEQUATE CAPACITY AND IN PROPER WORKING CONDITION?
- 16. IS EACH HOIST PROPERLY SECURED TO THE STIRRUP?
- 17. DOES THE POWER SUPPLY MEET HOIST REQUIREMENTS?
- 18. ARE THE EMERGENCY DESCENT AND E-STOP FUNCTIONING PROPERLY ON EACH HOIST?
- 19. HAS THE OVERSPEED BEEN TESTED AND IS IT FUNCTIONING PROPERLY?

OUTRIGGER BEAMS/ ANCHORS

- 20. ARE BEAMS ASSEMBLED CORRECTLY?
- 21. ARE THE CORRECT AMOUNTS OF COUNTERWEIGHTS PROPERLY SECURED TO THE BEAMS?
- 22. ARE TIEBACKS TAUT AND NO MORE THAN 25° OFF OF PARALLEL WITH THE BEAMS?
- 23. ARE TIEBACKS PROPERLY INSTALLED AND SECURED TO A SUITABLE 5000+ LB. ANCHOR?
- 24. IS EDGE PROTECTION BEING USED WHERE REQUIRED?
- 25. ARE SUSPENSION LINES PROPERLY ATTACHED TO THE OUTRIGGER BEAMS/ANCHORS?
- 26. ARE BEAMS EITHER PERPENDICULAR TO THE ROOF EDGE OR Laterally BRACED/SECURED?
- 27. ARE THE RED WARNING TAGS ATTACHED TO THE TIEBACKS IN PLACE?

INSPECTION ITEMS (CONTINUED):

- 28. ARE OUTRIGGER BEAMS LEVEL, OR SETUP WITH THE INBOARD END LOWER?
- 29. DO SUSPENSION LINES REACH THE GROUND/SAFE LANDING?

FALL PROTECTION

- 30. ARE THE LIFELINES AND INDEPENDENT ANCHOR POINTS RATED FOR AT LEAST 5000 LBS?
- 31. DO LIFELINES REACH THE GROUND OR A SAFE LANDING?
- 32. ARE ALL PLATFORM OCCUPANTS WEARING A PROPERLY ATTACHED FULL-BODY HARNESS?
- 33. HAVE ALL FALL PROTECTION COMPONENTS BEEN INSPECTED?

THESE ITEMS SHOULD BE REVIEWED ON DAILY BASIS AND/OR WHENEVER THE STAGE HAS BEEN LANDED. PROVINCIAL HEALTH AND SAFETY REGULATIONS/CODE REQUIRES THAT A FULL INSPECTION BE PERFORMED PRIOR TO USE EACH DAY OR SHIFT.

IF ANY ITEMS OR COMPONENTS ARE DAMAGED OR DEFECTIVE, CONTACT NORTHERN STRANDS ABOUT REPLACEMENT COMPONENTS. NEVER TRY TO FIX OR MODIFY ANY PART OF THE SUSPENDED PLATFORM OR ITS SUPPORT EQUIPMENT.

WHEN SENDING THE EQUIPMENT BACK AFTER RENTAL/COMPLETION OF PROJECT SCOPE, CONTACT NORTHERN STRANDS FOR A FULL LIST OF MATERIALS ON SITE TO AVOID UNNECESSARY CHARGES FOR MISSING ITEMS.

CONTACT NORTHERN STRANDS FOR DIGITAL COPIES OF PRE-USE INSPECTION FORMS.

LIFELINE/ROPE GRAB INSPECTION

LIFELINE ROPES MUST BE PULLED UP AND INSPECTED PRIOR TO USE; ITEMS TO CHECK FOR INCLUDE:

- EXCESSIVE ABRASION OR WEAR. FUZZ/STRANDS OF ROPE FIBRE THAT ARE LONGER THAN 25MM (1IN.) IN LENGTH.
- DISCOLORATION OR STAINING FROM EXPOSURE TO PAINT, OIL, GREASE ETC.
- PRESENCE OF ANY ADHESIVE SUBSTANCES ON THE FIBRES OF THE ROPE.
- BACK-TWISTED STRANDS OR ANY INCONSISTENCY IN THE DIAMETER OF THE ROPE AT ANY POINT.
- EXTREME SOILING TO THE POINT WHERE DIRT HAS MADE ITS WAY INSIDE THE FIBRES OF THE ROPE.
- ANY ROPE THAT HAS ARRESTED A FALL MUST BE REMOVED FROM SERVICE.

**** NOTE THAT RUNNING ROPE GRABS ON LIFELINE WILL NATURALLY PRODUCE SOME WEAR AND TEAR BUT THE PRECEDING INSPECTION CRITERIA MUST BE FOLLOWED.***

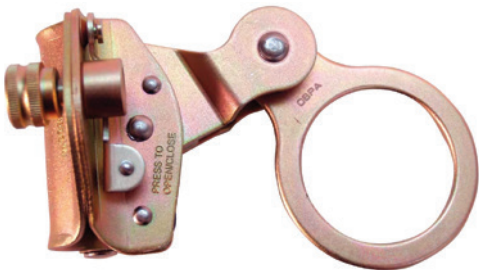


**DO NOT USE
ROPE WITH
VISIBLE DEFECTS**

ROPE GRAB/FALL ARRESTOR INSPECTION CRITERIA:

- ANY OBVIOUS PHYSICAL DAMAGE.
- ANY HINDRANCE OF PROPER FUNCTIONALITY OF THE CAM/SPRINGS OR PAWL/LOCKING MECHANISM.
- THE GRAB AND LIFELINE MUST BE THE SAME SIZE.

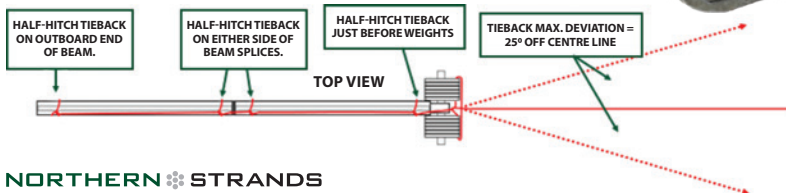
TEST THE ROPE GRAB BY ATTACHING IT TO A LIFELINE AND SHARPLY PULLING DOWN ON THE D-RING IN THE DIRECTION OF THE FALL. DO NOT USE THE ROPE GRAB AS PART OF A PERSONAL FALL ARREST SYSTEM IF IT DOES NOT LOCK WITHIN 305MM (12 INCHES).



FIST GRIP CLIP INSTALLATION

1. INSTALL THE FIRST CLIP ONE SADDLE WIDTH FROM THE DEAD END OF THE ROPE; TIGHTEN NUTS ALTERNATINGLY UNTIL THE SPECIFIED TORQUE VALUE IS REACHED.
2. INSTALL THE SECOND CLIP AS CLOSE TO THE EYE/THIMBLE AS POSSIBLE, TIGHTEN NUTS ALTERNATINGLY TO THE SPECIFIED TORQUE VALUE.
3. SPACE THE REMAINING CLIPS EVENLY BETWEEN THE FIRST TWO CLIPS ATTACHED, REMEMBERING TO ALTERNATE FROM NUT TO NUT UNTIL THE SPECIFIED TORQUE VALUE IS REACHED.
4. ONCE ALL OF THE CLIPS ARE INSTALLED, APPLY A LOAD OF EQUAL OR GREATER WEIGHT THAN THE LOADS EXPECTED (BUT DO NOT EXCEED WLL) AND RE-CHECK THE TORQUE ON EACH NUT.

DOUBLE SADDLE CLIPS (FIST GRIP)			
CLIP/ROPE SIZE	MINIMUM # OF CLIPS	TURNBACK (INCHES)	TORQUE (FT-LBS.)
5/16" (8MM)	3	10	30



PROPER REEVING OF WIRE ROPE IN WALK-THROUGH STIRRUPS

SUSPENSION CABLES MUST BE RUN DOWN THE FRONT SIDE OF THE TOP SHEAVE WHEEL ASSEMBLY IN THE C-BOOM AND OVER THE BACK SIDE OF THE BOTTOM SHEAVE WHEEL ASSEMBLY. EACH SHEAVE ASSEMBLY CONTAINS TWO SHEAVE WHEELS MOUNTED PARALLEL TO ONE ANOTHER. WHEN RUNNING ONE SINGULAR SUSPENSION LINE INTO EACH CLIMBER, THE LINE CAN BE REEVED THROUGH EITHER THE LEFT OR THE RIGHT SHEAVE IN THE TOP SHEAVE ASSEMBLY, WHICHEVER SUITS THE APPLICATION BETTER. IN THE BOTTOM SHEAVE ASSEMBLY, WHICH ALSO CONSISTS OF TWO SHEAVE WHEELS IN PARALLEL, THE LINE SHOULD BE RUN UP AND OVER WHICHEVER SHEAVE WHEEL BEST ALIGNS WITH THE ROPE PORT ON THE CLIMBER IN USE. UPON EXITING THE CLIMBER, THE SUSPENSION CABLES MUST RUN IN BETWEEN THE SUPPORT CHANNELS THAT THE CLIMBER IS ATTACHED TO. IF RUN OVER THE BACK, THE CABLES WILL SAW INTO THE SUPPORT CHANNELS.

WHEN USING STAGES WITH DUAL SUSPENSION LINES, IT IS IMPERATIVE THAT THAT INNERMOST SUSPENSION LINE BE RUN OVER THE INNERMOST SHEAVE WHEELS AND INTO THE CLIMBER, AND VICE VERSA FOR THE OUTERMOST SUSPENSION LINES.



ENSURE SUSPENSION LINE RUNS THROUGH THE GROOVE OF THE SHEAVE.

DAILY CLIMBER CHECKS

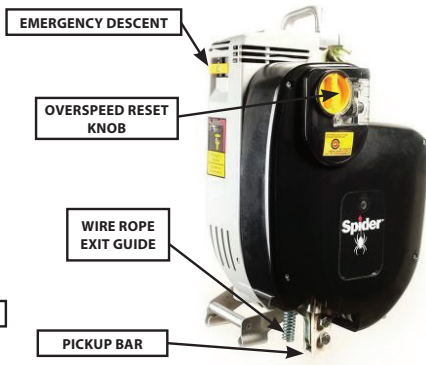
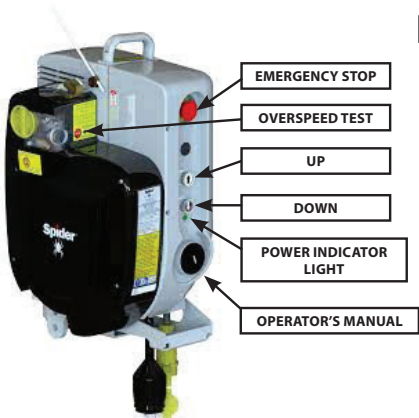
1. ENSURE THE **EMERGENCY STOP** BUTTON (ELECTRICAL DISCONNECT) IS FUNCTIONING PROPERLY BY ENGAGING THE SWITCH AND PRESSING THE UP AND/OR DOWN BUTTONS ON THE CLIMBER. THE CLIMBER PASSES THIS TEST IF IT DOES NOT ACTIVATE WHEN EITHER THE UP OR DOWN BUTTONS ARE PRESSED.
2. TEST THE **OVERSPEED BRAKE**. RAISE THE CLIMBER UP OFF OF THE GROUND/LANDING, PUSH THE BLACK BUTTON ON THE OVERSPEED ASSEMBLY (THE ONE WITH A STOP SIGN BESIDE IT), AND TRY TO LOWER THE CLIMBER/STAGE. THE CLIMBER PASSES THIS TEST IF IT CANNOT DESCEND THE SUSPENSION ROPES. RAISE THE CLIMBER UP AT LEAST ½ AN INCH AND RESET THE OVERSPEED RESET WHEEL ON THE SIDE OF THE CLIMBER JUST BESIDE THE INSERTION POINT OF THE ROPE.
3. TEST THE **CONTROLLED DESCENT** FEATURE OF THE HOIST. PULL UP ON THE YELLOW BAR OPPOSITE THE MAIN CONTROLS TO LOWER THE STAGE (NOTE THAT OCCASIONALLY EXTRA WEIGHT WILL HAVE TO BE ADDED. THE CLIMBER PASSES THIS TEST IF THE STAGE LOWERS AT A CONTROLLED RATE THAT DOES NOT TRIP THE OVERSPEED BRAKE.



RUN-OFF TEST

WHENEVER THE STAGE IS MOVED OR UPON FIRST USE, INSERT 305MM (12 IN.) OF SUSPENSION CABLE INTO THE CLIMBER AND PULL UP SHARPLY. THE OVERSPEED DEVICE SHOULD LOCK ON TO THE CABLE BEFORE IT CAN ESCAPE THE ROPE PORT. RESET THE OVERSPEED BRAKE AND REPEAT THE RUN-OFF TEST TWO MORE TIMES FOR A TOTAL OF THREE PULLS. PERFORM THIS TEST ON EACH CLIMBER IN SERVICE AT LEAST ONCE A WEEK TO ENSURE THE OVERSPEED DEVICE IS WORKING CORRECTLY.

PARTS OF THE SPIDER SC1000 CLIMBER



SUSPENDED ACCESS TRAINING

SUSPENDED ACCESS WORK CAN BE EXTREMELY HAZARDOUS WITHOUT PROPER TRAINING AND KNOWLEDGE. NORTHERN STRANDS' SUSPENDED ACCESS TRAINING WILL MAKE SURE YOU ARE PREPARED TO WORK SAFELY WITH THIS EQUIPMENT.

SUSPENDED ACCESS EQUIPMENT TRAINING:

- INSTRUCTS ON ANCHOR STRENGTH REQUIREMENTS.
- HOW TO PRE-PLAN ANY OF YOUR SUSPENDED ACCESS JOBS.
- INCLUDES INSPECTION TECHNIQUES FOR YOUR EQUIPMENT.
- REVIEWS YOUR BASIC FALL ARREST REQUIREMENTS.
- INFORMS YOU OF THE RIGHTS YOU HAVE WHEN WORKING WITH SUSPENDED ACCESS EQUIPMENT.
- TEACHES THE CORRECT METHOD OF INSTALLING OUTRIGGER BEAMS. THE COURSE ALSO GIVES HANDS-ON GUIDANCE OF THE ASSEMBLY AND USE OF A SUSPENDED PLATFORM.

UPON SUCCESSFUL COMPLETION OF THE COURSE, YOU WILL BE ISSUED A CERTIFICATE FROM NORTHERN STRANDS THAT IS VALID FOR THREE (3) YEARS.



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