SmartLadder™ Installation w/ Divider Beam Kit (#DBK)

1. The Divider Beam Kit (#DBK) can accommodate divider beams 4" to 6" wide and up to 10" high.
2. Divider beams may be HSS (tube steel) or I-beam (standard or wide flange) - HSS6x4 shown.
3. Divider beam top of steel (TOS) may be from 6" above to 12" below the elevator sill.
4. The #DBK can support one (1) ladder or two (2) ladders back-to-back.

SmartLadder™ #DBK Installation Steps

1. Mount Unistrut stanchions onto divider beam with the tall stanchion nearest the elevator entrance. Center stanchions on the divider beam.
2. Fasten M16 threaded rods & clamp plate tight to beam. Torque nuts to 185 ft/lbs [250 Nm] dry, 146 ft/lbs [198 Nm] lubricated.
3. If a multi-section ladder, bolt together using provided $\frac{5}{16}$-16 fasteners, align sections.
4. Do NOT install top Spring / Switch Bracket Assy at this time.
5. Center ladder between Unistrut stanchions and onto provided $2\frac{3}{4}$" high Setup Blocks, one parallel to wall and one perpendicular to wall for greater stability.
6. Each ladder pivot arm must be pointing straight down & aligned with ladder riser.
7. Insert Unistrut spring nuts into Unistrut stanchion channels aligned with ladder bracket mounting holes. Add M12x80 threaded studs into nuts leaving sufficient exposed stud for spacers (below), bracket, washer, lock washer & nut.
8. Add provided one (1) base notched (no rotate) square washer and up to four (4) flat square washer spacers based on divider beam width and ladder clearance to the car.
9. Verify all points of attachment are plumb - add additional shims if required (not incl.). Rotate upper wall brackets to align angle leg with Unistrut & spacers, insert brackets onto threaded studs. Add washers, lock washers & nuts, torque to 50 ft/lbs [68 Nm] dry.
10. Rotate lower floor brackets to align angle leg with floor, anchor with $\frac{3}{8}$" x 3" concrete screws, or equal (not incl.).
11. Mount "Warning - Switched Ladder" sign to wall, visible from entrance. Provide mounting surface if required.

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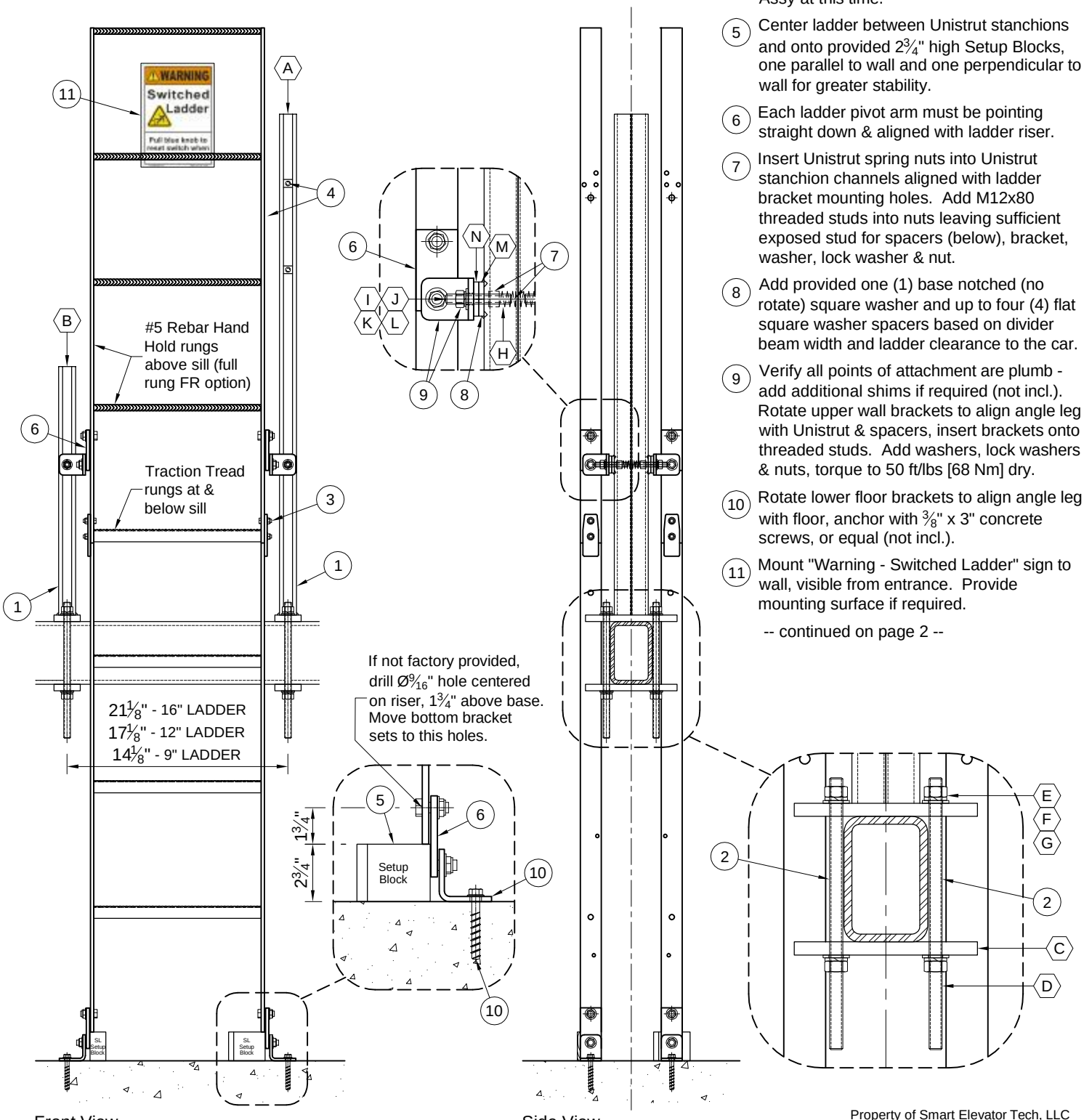
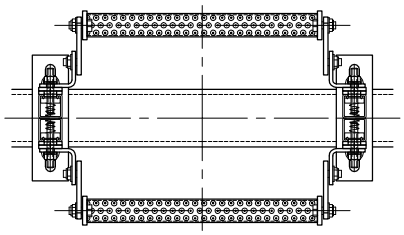


Front View

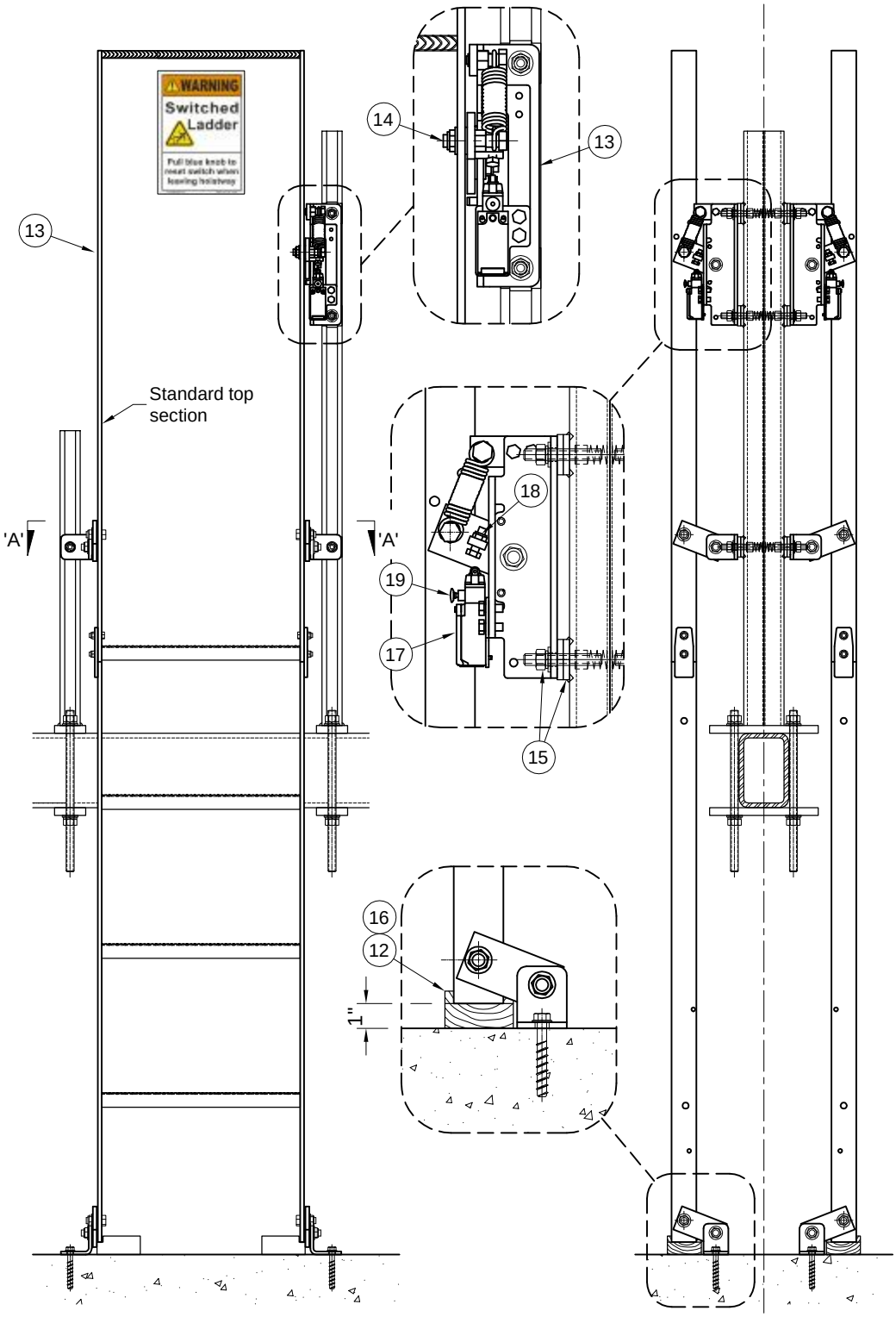
Side View



Section 'A-A'

#DBK Material List
for (2) Ladders

Item	Description	Qty.
A	Stanchion - Tall	1
B	Stanchion - Short	1
C	Bottom Clamp Plate	2
D	M16-2 x 333 Threaded Rod	4
E	M16-2 Nut	8
F	M16 Lock Washer	8
G	M16 Flat Washer	8
H	#P1010M12 Channel Spring Nut	8
I	M12-1.75 x 80 Threaded Stud	8
J	M12-1.75 Nut	8
K	M12 Lock Washer	8
L	M12 Flat Washer	8
M	#P2864 Sq. Washer - No Rotate	8
N	#P1064 Sq. Washer	32



Front View

Side View

-- continued from page 1 --

12. Turn over Setup Blocks so that ladder riser bases rest in stepped grooves, for 1" spacing above pit floor.
13. Verify hand (RH shown) of top Spring / Switch Bracket Assy. Must be on side closest to entrance. Reverse if required - mirror image (take picture for reference).
14. Attach assy. to ladder riser with ½-13 thin nylon insert nut. Provide additional grease if dry. Do not tighten - leave sufficiently loose for proper pivot arm movement.
15. Anchor top bracket to tall Unistrut stanchion, with two (2) sets of Unistrut nuts, threaded studs, square washer spacers, washers, lock washers & nuts (see steps 6 - 8). Verify bracket is parallel with ladder.
16. Remove Setup Blocks. Ladder should land on pit floor with weight of a person (>20 lb.) and retract by spring, without binding, with person off ladder. Verify switch trigger bolt (step 14) must not engage the switch roller plunger at this step. If ladder binds, hangs, etc., verify brackets are plumb, shim & adjust as required.
17. Pipe & wire N.C. switch contacts in series with pit switch or dedicated run to controller, if provided.
18. While standing on ladder, loosen jamb nut and adjust switch trigger bolt to actuate switch, leaving between 1/32" - 1/16" [0.7-1.5 mm] remaining travel on switch plunger with ladder firmly at floor. Blue reset knob will consistently set when adjusted correctly (item 19). Tighten jamb nut to lock position of trigger bolt.
19. Test operation of ladder and switch. Verify opening of the elevator safety circuit (removal of power from motor & brake) with person on ladder (blue knob will move in). Switch & safety circuit remain open until blue reset knob is pulled upon exiting pit.