

PHYSICAL DEMANDS ANALYSIS (EXAMPLE)
ROOFER | FIELD INSTALLER



JOB DESCRIPTION

TASK #	TASK DESCRIPTION	% OF SHIFT
1	Load materials, drive to the site and unload.	5%
2	Set up ladders, install fall protection anchors and/or safety railings and transfer materials and equipment to roof using ropes, hoist, elevating work platform, etc.	10%
3	Install clipping on roof – lay down onto parapet and secure clipping using screws.	5%
4	Install flashing on roof and secure with screwdriver and pitting knife and pull flashing to fit under previous piece.	80%

*The physical demands may vary depending on company and location.
 Confirm this physical demands analysis is an accurate representation of the specific job.*

ITEMS HANDLED

- Snips (up to 1 lb.)
- Folding pliers (1 lb.)
- Drill (2 lb.)
- Compass
- Hammer (2 lb.)
- Aviation snips
- Clamps (up to 2 lb.)
- Hand folders (up to 6")
- Pitting knife
- Pry bar
- Hammer drill (4 lb.)
- Grinder (3 lb.)
- Pylons (12 lb.)
- Fall arrest equipment (23 lb.)
- Tool bag (26 lb.)
- Ladders (up to 36 ft. – 70 lb.)
- Fire extinguisher (32 lb.)

MATERIALS

- Flashing (3x5ft. pieces – 18 lb.)
- Clipping
- Roxul insulation (30-40 lb.)

PERSONAL PROTECTIVE EQUIPMENT

- Fall protection equipment
- Long sleeves and pants
- Work boots
- Gloves
- Face shield or safety glasses for grinding and industrial hammer tasks

ENVIRONMENTAL EXPOSURE

Works on rooftops and edges. Exposed to heat, wind, storms, rain, dust: (from hammering drilling/grinding).

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JOB TITLE	ROOFER - FIELD INSTALLER					LENGTH OF SHIFT (HRS)	8
JOB DESCRIPTION							
The worker is required to retrieve the required flashing and supplies from the shop, drive to the project site, prepare the site with ladders, fall arrest equipment and supplies, to then install the designated flashing and clipping (if required). Cleaning site can be completed as the crew progresses through the project or at the end of the shift.							
PHYSICAL JOB DEMANDS - Grade using a scale of 0 - 4							
0 = NOT REQUIRED		1 = SELDOM REQUIRED: < 5%			2 = MINOR REQUIREMENT: 5-33%		
-		Less than 30 minutes per day or not daily			30 minutes up to 3.5 hours per day or 1 repetition every 30 minutes		
3 = OCCASIONAL REQUIREMENT: 34-66%				4 = FREQUENT REQUIREMENT: 67-100%			
3.5 hours up to 6.5 hours per day or 1 repetition every 2 minutes				6.5 hours per day up to shift length or 1 repetition every 30 seconds			
INSTRUCTIONS: Place an X under number 0,1,2,3 or 4 to identify the frequency of each body demand or exposure.							
PHYSICAL JOB DEMANDS	0	1	2	3	4	DESCRIBE THE TASK(S) PERFORMED	
WHOLE BODY DEMANDS							
SITTING			X			Driving to and from site.	
SITTING WITH VIBRATION/JARRING	X					-	
DRIVING			X			Driving to and from site.	
STANDING				X		While on roof, on ladder.	
RUNNING	X					-	
WALKING							
LEVEL				X		Around roof.	
UNEVEN GROUND			X			Exterior of site.	
SLOPES / RAMPS	X					-	
CLIMBING							
REGULAR STAIRS		X				To access the roof.	
STEEP STAIRS		X				To access roof using elevating work platform, scissor lift or scaffolding.	
LADDERS			X			To access roof or access scissor lift. Frequency depending on site.	
OTHER	X					-	
LOW LEVEL WORK							
KNEELING					X	During installation of fall arrest equipment, preparation, and installation of clipping/flashing/insulation.	
SQUATTING			X			Working on a roof overhang (tight space). Picking up materials, position while using manual (rope) method to load/unload materials and equipment on roof.	
CRAWLING			X			When moving during installation of clipping/flashing/insulation on the roof.	

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SPECIFIC BODY DEMANDS						
NECK MOVEMENTS						
BENDING						
SUSTAINED					X	Loading/unloading materials and equipment, during fall arrest equipment, clipping, flashing and insulator install, checking surroundings. Looking up when using manual (rope) method to load/unload materials and equipment on roof (ground position), reviewing site from ground level.
REPETITIVE	X					-
TWISTING						
SUSTAINED	X					-
REPETITIVE			X			During fall arrest, clipping, flashing and insulation installation, checking surroundings.
TRUNK MOVEMENTS						
BENDING						
SUSTAINED					X	During installation of fall arrest equipment, preparation, and installation of clipping/flashing/insulation.
REPETITIVE	X					-
TWISTING						
SUSTAINED	X					-
REPETITIVE			X			Checking progress of clipping/flashing while kneeling, while loading/unloading materials and equipment from work truck.
SHOULDER MOVEMENTS						
OVERHEAD		X				Assisting/controlling materials and equipment while using manual (rope) method for transfer onto/off the roof, installing clipping/flashing/insulation overhead, setting up/securing ladder, pushing ladder onto work truck rack.
FORWARD REACHING					X	Loading/unloading materials and equipment from work truck, drilling clipping to install onto parapet, reaching across the parapet to connect clipping to flashing during installation, securing, or adjusting flashing to neighbouring piece.

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PHYSICAL JOB DEMANDS	0	1	2	3	4	DESCRIBE THE TASK(S) PERFORMED
GRIPPING DEMANDS						
DOMINANT HAND						
REPETITIVE	X					-
CONTINUOUS					X	Handling materials and equipment while loading/unloading truck, at the shop and on site, moving materials onto/from the roof using hoist/crane/rope method, gripping steering wheel while driving, preparing, and installing clipping, flashing, installing fall arrest equipment, using hand tools, etc.
NON-DOMINANT HAND						
REPETITIVE	X					-
CONTINUOUS				X		Handling materials and equipment while loading/unloading truck, at the shop and on site, moving materials onto/from the roof using hoist/crane/rope method, gripping steering wheel while driving, preparing, and installing clipping, flashing, installing fall arrest equipment, using hand tools, etc.
FINGER DEXTERITY				X		Using screws to install clipping and flashing, gripping flashing, pinching lips of the flashing together.
MANUAL HANDLING DEMANDS						
LIFTING						
LIGHT (MAX 20 LB / 9 KG)			X			Lifting materials and equipment including flashing (18 lb.), pylons (12 lb.), etc. when loading/unloading truck, project site and while on the roof.
MEDIUM (MAX 50 LB / 22.5 KG)			X			Lifting heavier materials and equipment including clippings and insulation (up to 40 lbs), tool bag (26 lb.), fall arrest equipment (23 lb.).
HEAVY (MAX 100 LB / 45 KG)		X				Ladders (up to 70 lb.), etc.
VERY HEAVY (OVER 100 LB / 45 KG)	X					-
CARRYING						
LIGHT (MAX 20 LB / 9 KG)		X				Carrying a garbage bin on site, materials including flashing (18 lb.), clippings, etc. throughout the site and on the roof.
MEDIUM (MAX 50 LB / 22.5 KG)		X				Carrying materials and equipment including fall arrest equipment (23 lb.), tool bag (26 lb.), insulation (40 lb.).
HEAVY (MAX 100 LB / 45 KG)		X				Ladders – up to 70 lb. carried from truck to building.
VERY HEAVY (OVER 100 LB / 45 KG)	X					-

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PHYSICAL JOB DEMANDS	0	1	2	3	4	DESCRIBE THE TASK(S) PERFORMED
MOBILE PUSHING						
LIGHT (MAX 20 LB / 9 KG)	X					-
MEDIUM (MAX 50 LB / 22.5 KG)	X					-
HEAVY (MAX 100 LB / 45 KG)	X					-
VERY HEAVY (OVER 100 LB / 45 KG)	X					-
MOBILE PULLING						
LIGHT (MAX 20 LB / 9 KG)	X					-
MEDIUM (MAX 50 LB / 22.5 KG)	X					-
HEAVY (MAX 100 LB / 45 KG)	X					-
VERY HEAVY (OVER 100 LB / 45 KG)	X					-
STATIC PUSHING/PULLING						
LIGHT (MAX 20 LB / 9 KG)		X				Pulling flashing off truck (18 lb. of force)
MEDIUM (MAX 50 LB / 22.5 KG)	X					-
HEAVY (MAX 100 LB / 45 KG)				X		Pushing flashing onto parapet (76.5 lb. force), pulling flashing to remove/adjust from clipping (54 lb. of force), securing flashing to neighbouring flashing (pushing: 85 lb., pulling: 171.75 lb. of force), pushing drill into flashing to secure on parapet (54 lb. of force). Pushing flashing down to secure on parapet (176.5 lb. of force).
VERY HEAVY (OVER 100 LB / 45 KG)	X					-