

PHYSICAL DEMANDS ANALYSIS (EXAMPLE)
ROOFER | MOPPING MEMBRANE

JOB DESCRIPTION

TASK #	TASK DESCRIPTION	% OF SHIFT
1	Load materials, drive to site and unload. Set up fall protection plan and load materials and equipment to roof.	10%
2	Demolition Phase – remove existing membrane, coverboard, insulation, vapour barrier and Q decking by cutting the materials into cubes and dispose down chute. Uses chain saws, utility knives, shovels, spades, roof cutter, etc.	20%
3	Operate kettle to prepare hot tar and transport tar. Prepare and feed the asphalt kegs into the kettle and monitor the progress. This includes monitoring the level of asphalt, the temperature in the kettle and when the other roofers require tar to be transported onto the roof. The operator will also open the lids of the kettle and use the screen to pick excess paper.	10%
4	Lay Q decking, drywall/densdeck from supply storage on roof and secure using screws and plates. Roll out adhesive and adhere vapour barrier to the drywall/densdeck.	20%
5	Install insulation – use mop to lay tar.	10%
6	Finish with mopping the membrane and gravel (if requested).	20%
7	Clean site of excess Q decking, densdeck, insulation, membrane, and garbage. Remove ladders.	5%
8	Drive back to shop and unload as required.	5%

*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

- Chain saws (12 lb.)
- Utility knives (0.5 lb.)
- Shovels (6 lb.)
- Spades (6 lb.)
- Roof cutter
- Hoist
- Crane (if available)
- Power pack blower (22 lb.)
- Drill (2 lb.)
- Tape measure
- Propane tanks
- Dolly
- Push brooms (8 lb.)
- Tar mop (24 lb.)
- Tar ladle
- Wheelbarrow
- Ladders (up to 36 ft. – 70 lb.)
- Fall arrest equipment (23 lb.)
- Safety railings
- Pylons (12 lb.)

MATERIALS

- Insulation
- Felt membrane (100 lb.)
- Hot tar
- Gravel
- Drywall/densdeck (57/66 lb.)
- Vapour barrier rolls (80 lb.)
- Q decking

PERSONAL PROTECTIVE EQUIPMENT

- Work boots
- Heat resistant gloves for kettle operations
- Face shield for kettle operations
- Coveralls for kettle operations

ENVIRONMENTAL EXPOSURE

Works on rooftops. Exposed to heat, wind, storms, rain, dust (during demolition), and asphalt/tar fumes.

PHYSICAL DEMANDS ANALYSIS (EXAMPLE) ROOFER | MOPPING MEMBRANE

JOB TITLE	ROOFER - MOPPING MEMBRANE					LENGTH OF SHIFT (HRS)	8
JOB DESCRIPTION							
The worker is required to complete demolition of the pre-existing roof, lay the Q decking (if not previously installed), drywall/densdeck and vapour barrier, secure the insulation with mopping tar in order to install the roof membrane.							
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, during breaks.	
SITTING WITH VIBRATION/JARRING	X					-	
DRIVING			X			Driving to and from site.	
STANDING				X		While on roof, during demolition and installation, walking on site.	
RUNNING	X					-	
WALKING							
LEVEL				X		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 or 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 felt membrane on parapet, fall arrest equipment and safety railings, demolition, preparation, and installation of roofing membranes, during site clean up.	
SQUATTING			X			During installation of fall arrest equipment and safety railings, demolition, preparation, and installation of roofing materials/membranes on parapets, during site clean up.	
CRAWLING			X			During installation of vapour barrier and drywall/densdeck (securing to Q decking), felt membrane on parapet.	

PHYSICAL DEMANDS ANALYSIS (EXAMPLE) ROOFER | MOPPING MEMBRANE

PHYSICAL JOB DEMANDS	0	1	2	3	4	DESCRIBE THE TASK(S) PERFORMED
SPECIFIC BODY DEMANDS						
NECK MOVEMENTS						
BENDING						
SUSTAINED	X					-
REPETITIVE					X	<p>Loading/unloading materials and equipment, during installation of fall arrest equipment and safety railings, demolition of previous roof, installation of Q decking (as necessary), drywall/densdeck, vapour barrier, insulation and felt membrane, operating roof cutter, kettle and hi-boy, transporting wheelbarrow, power pack blower, tar mop.</p> <p>Looking up when using manual (rope) or mechanical (hoist/crane) method to load/unload materials and equipment on roof (ground position), reviewing site from ground level, loading/unloading materials, and equipment onto/from truck, checking surroundings.</p>
TWISTING						
SUSTAINED	X					-
REPETITIVE				X		<p>While loading/unloading materials and equipment, during installation of fall arrest equipment and safety railings, demolition of previous roof, installation of Q decking (as necessary), drywall/densdeck, vapour barrier, insulation and felt membrane, transporting hi-boy and wheelbarrow, operating roof cutter and kettle, power pack blower, tar mop, site clean up, checking surroundings.</p>
TRUNK MOVEMENTS						
BENDING						
SUSTAINED	X					-
REPETITIVE				X		<p>During installation of fall arrest equipment and safety railings, guiding hoist, demolition, preparation, and installation of roofing materials/membranes, during site clean up.</p>
TWISTING						
SUSTAINED	X					-
REPETITIVE				X		<p>Checking progress of roof demolition and installation, while using tar mop and push broom, kettle and hi-boy, power pack blower, during site clean up, loading and unloading materials and equipment from work truck.</p>
SHOULDER MOVEMENTS						
OVERHEAD		X				<p>Assisting/controlling materials and equipment while using manual (rope) or mechanical method for transfer onto/off the roof, operating kettle and hi-boy, setting up/securing ladder, pushing ladder onto work truck rack, etc.</p>
FORWARD REACHING					X	<p>Loading/unloading materials and equipment from work truck, drilling drywall/densdeck to install onto Q decking, reaching across the body to move tar mop and spade/shovel, removing garbage using the chute, operating power pack blower, kettle and roof cutter, securing or adjusting drywall/densdeck, insulation, vapour barrier, felt membrane, etc.</p>

PHYSICAL DEMANDS ANALYSIS (EXAMPLE) ROOFER | MOPPING MEMBRANE

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, during roof demolition, preparing and installing Q decking (as necessary), drywall/densdeck, vapour barrier, insulation, felt membrane, operating kettle transporting hi-boy and wheelbarrow, moving gravel, installing fall arrest equipment, safety railings and ladders, using various tools, removing garbage and site clean up, 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, during roof demolition, preparing and installing Q decking (as necessary), drywall/densdeck, vapour barrier, insulation, felt membrane, operating kettle transporting hi-boy and wheelbarrow, moving gravel, installing fall arrest equipment, safety railings and ladders, using various tools, removing garbage and site clean up, etc.
FINGER DEXTERITY				X		Using screws and drill to install drywall/densdeck, removing cover from asphalt kegs, operating kegs and hi-boy, etc.
MANUAL HANDLING DEMANDS						
LIFTING						
LIGHT (MAX 20 LB / 9 KG)				X		Lifting materials and equipment including: Q decking (as necessary), insulation, chainsaws (12 lb.), push brooms (8 lb.), various tools, garbage on site, etc. when loading/unloading truck, project site, during site clean up, and while on the roof during demolition and roof installation.
MEDIUM (MAX 50 LB / 22.5 KG)				X		Lifting materials and equipment including power pack blower (22 lb.), tar mop (24 lb.) and tar ladle, fall arrest equipment (23 lb.), tool bag (26 lb.), etc.
HEAVY (MAX 100 LB / 45 KG)			X			Lifting materials and equipment including drywall/densdeck (57/66 lb.), asphalt kegs (50 lb.), felt membrane (100 lb.), ladders (up to 70 lb. – rare).
VERY HEAVY (OVER 100 LB / 45 KG)	X					-
CARRYING						
LIGHT (MAX 20 LB / 9 KG)				X		Carrying various materials and equipment including chainsaw (12 lb.), push brooms (8 lb.), spades and shovels (6 lb.), tar ladles, garbage, etc. throughout 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, asphalt kegs (50 lb.), drywall/densdeck (57/66 lb.), etc.
HEAVY (MAX 100 LB / 45 KG)			X			Ladders are up to 70 lb., membrane (100 lb.)
VERY HEAVY (OVER 100 LB / 45 KG)	X					-

PHYSICAL DEMANDS ANALYSIS (EXAMPLE)

ROOFER | MOPPING MEMBRANE

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			Pushing hi-boy (67.5 lb.), pushing wheelbarrow with gravel (69.5 lb.).
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					-
MEDIUM (MAX 50 LB / 22.5 KG)			X			Finishing stages requires pulling to reposition/lay vapour barrier, insulation, drywall/densdeck and Q decking, removing previous roofing from Q decking, pushing drill into drywall/densdeck (35.5 lb.), pushing to use roof cutter, using spades/shovels to move gravel, etc.
HEAVY (MAX 100 LB / 45 KG)	X					-
VERY HEAVY (OVER 100 LB / 45 KG)	X					-