Roofing (Heat) Hazards Meeting Kit



During roofing operations, workers use hot tar, torches, hot kettles, or plastic welding machines that can expose themselves to heat, flammable materials, burns hazards, and overexertion.

CONTROL HEAT AND HOT WORK HAZARDS WHEN ROOFING

1. Torch Work

- Hand-held torches and torch-applied roofing systems create hazards in application for those who are working on the roof as well as the public. The hot modified bitumen and the torch can both cause serious burns if one is not careful. The temperatures that these tools generate can also ignite fires. It requires a highly experienced roofer to be able to apply these techniques in the safest manner possible.
- Firstly, safety precautions are a must when working with torch-applied roofing systems and throughout the application process. Personal protective equipment that needs to be worn by roofing contractors include hard hats, safety boots, eye protection and gloves. Be sure to check that no article of clothing being worn in synthetic or prone to flames. When initially getting up on the roof, an experienced roofing contractor will evaluate the surface for any combustible materials. If there are any, remove them as best as you can. Apply hot or cold membranes where required and seal off intakes or projections to prevent a fire from spreading if something does spark.
- Always invest the time to check the torch before using it. If it’s not in good working order, don’t use it. Any propane equipment that is leaking should be discarded and replaced immediately. If you notice a leak at any point during operations, cease work and address it. All equipment used should also be stored in protective casing to avoid tampering or any associated hazards. While you’re on the job and the torch is not in use, having the torch head pointing at an upward angle is safest. Never have the torch unit hanging over a roof edge or a curb. If you are not the torch operator, remain a minimum of two or three metres away from the flame.
- Be attentive to anything that could be flammable when using the torch. Any cant strips, insulation, wood, grease, or lint exhaust are extremely hazardous. In addition, torching towards flashing, corners, voids, or behind metal counter-flashings is highly dangerous. Any time a torch is

being operated near pipes, air vents, or HVAC units, special attention needs to be paid because you’re never sure where a flame may lead.

2. Prevention / Training Go hand in hand

- Following torching applications, a fire watch should take effect including the ceasing of any torching for a minimum of three hours before finishing work for the day. There needs to be a single person responsible to lead in the event of a fire and an escape route needs to be defined. At least one fully charged dry chemical fire extinguisher, per torch being used, should be handy as well.

BEST WORKER PRACTICES IN HOT WORK OPERATIONS

1. Use proper personal protective equipment

- During work, wear light-colored, flame-resistant clothing with long sleeves and cuffless long pants.
- Collars and hoods cowls protect your face, neck, and ears.
- Wear a hard hat, safety boots with a non-slip sole and heel, and leather or heat-resistant gloves.
- Don’t tuck your pants into your boots.
- Face shields, side-shielded safety glasses, or goggles protect your eyes.
- A respirator protects your lungs from fume exposures.
- For hot tar roofing, wear a face shield when you add tar chunks or kegs to the tanker truck or kettle.

2. Know the conditions of the work environment

- Check the weather before you work.
- Ensure that cool water is available nearby.
- When possible, try to work in a cooling breeze and keep fumes away from workers.
- Do the heaviest work in shaded areas and the coolest part of the day.
- Stay hydrated by drinking small amounts of water frequently.
- Remove your protective equipment when you take breaks.

3. Plan for emergency situations

- Make an emergency plan.
- Know the roof escape routes.
- Set up communication between the roof crew, building, and ground workers.
- Know the local emergency numbers for fire and medical services.
- Know first aid for heat illness and severe burns.

HOT ROOFING OPERATION TAKEAWAYS

1. Always begin with your Pre-Start Talk
2. Work only during good weather conditions and avoid extreme heat/cold
3. Ladders should be stable and properly secured or tied off
4. Wear proper PPE
5. Carefully position ropes and extension cords so they’re not underfoot
6. Sweep the roof before and after work and make sure it is clear of dirt and debris

7. Use guardrails whenever possible
8. Skylights should be guarded appropriately
9. Be careful of slate and tile roofs

FINAL WORD

There are many exposures in roof top operations that lead to serious injuries, heat illness and even death. It is understandable when one considers workers use hot tar, torches, hot kettles that exposes workers to heat, flammable materials and burns hazards.