

Risk assessment checklist – Damage to buildings from cold temperatures and snow

■ Risk has been considered ■ Action required

Comment	Yes	No	N/A	Action identified	Person responsible
Do you undertake regular and systematic building inspections in order to help identify problems or defects promptly?					
Where defects are identified is there a prioritised plan of action to deal with them? Is this based on the expected threats from the time of year?					
Do you inspect and clean all elements of the roof drainage and guttering to ensure that water does not collect and isn't being prevented from efficiently draining away? This is particularly important in the autumn when leaves can rapidly impair a roof drainage network.					
<p>Ahead of cold temperatures have you fully identified and comprehensively checked the following vulnerable areas:</p> <ul style="list-style-type: none"> • sprinkler systems • canopies • externally located cooling systems such as fan coil units and cooling towers • externally mounted water or fluid filled pipes • roof mounted utilities and services • unheated areas or buildings including roof voids or penthouses. <p>Protect and shield if needed the drain down where appropriate, top up antifreeze systems to correct concentration, trace heating and lagging as expected.</p>					

Comment	Yes	No	N/A	Action identified	Person responsible
<p>Pre-Winter Precautions For Sprinkler System: Have you introduced, as part of an ongoing programme of inspections and tests, a regime to inspect and test the following?</p> <ul style="list-style-type: none"> • electrical trace heating system is operational over the full length of the trace heating tape • pipe insulation isn't damaged exposing sprinkler or water filled pipes to frost damage • tank immersion heaters are operational • anti freeze solutions percentages in sprinkler system is to the correct level or percentage • heaters in pump houses and valve chambers are set correctly and operate as required • wet type sprinkler systems are frost stat controlled with the heating operational for all sprinkler areas to maintain a minimum 4oC at all times • alternate or dry systems, please check they are on air. 					
<p>When clearing snow from yards, driveways and footpaths around premises, do you ensure that it's not deposited against the foot of any downpipes as this may interfere with effective drainage?</p>					
<p>When snow is due or has fallen, are your yard based fire hydrants and water supply valves, including within pits, readily identifiable and still accessible?</p>					
<p>Does your pre emergency and emergency response plan consider cold temperatures and snow fall? Are your site drawings up to date and accurate? When yards and roofs are covered with snow, knowing where your equipment such as sky lights are is essential. When snow fall is expected, establish where snow will accumulate on roofs and in yards. Roofs with different heights as well as roof mounted services can cause drifting. Does your plan include a team trained and resourced to clear the roof(s)? Does this include skylights/roof lights? Uneven roof loads can cause a roof to be unevenly loaded and cause collapse. Have you considered prevailing wind directions and accumulations?</p>					
<p>Have any explosion relief systems and venting systems been considered in respect of ice and snow? Ice can 'weld' shut a vent and snow on top of an emergency vent totally compromises its expected performance.</p>					

Comment	Yes	No	N/A	Action identified	Person responsible
Are you watchful for signs of stress of the roof and wall structure such as deflection, cracking, splitting or twisting, particularly in trusses, purlins, joists, beams and girders?					
Are you alert to any unusual sounds emanating from the building such as cracking or creaking from the roof?					
Any work at height during adverse weather will have the added risk of snow, ice and cold weather. Have you made certain that a full risk assessment is carried out and a safe method of work established?					
Have you considered the exposure from nearby trees falling laden with snow? Trees horizontally closer than their height have the potential to fall onto your building.					
Do you have procedures in place for evacuation if there is any doubt about the integrity of a roof in extreme conditions?					
<p>If you're at significant risk from snowfall, have you considered the use of trace heating systems to help melt snow and ice before it accumulates to a dangerous level?</p> <p>If you have trace heating systems are these maintained and operable?</p> <p>Unless monitored to a constantly attended location, during freezing temperatures trace heating systems should be checked daily.</p>					
Have you reviewed your business continuity plans within the last year and are you confident that they would respond to all winter related scenarios?					
With less staff onsite, many incidents occur during a shut down for holidays such as Christmas or New Year. Are your management of change and risk assessment procedures robust enough for this additional exposure?					

Comment	Yes	No	N/A	Action identified	Person responsible
<p>If you're going to use temporary heaters, has a formal hot work management system or risk assessment process been completed?</p> <p>In extreme conditions, if you plan to use temporary heaters these should only be employed in conjunction with a formal hot work management system or risk assessment process and permit issuance. This should be rigorously enforced and revisited every shift or on an 8 hour basis.</p> <p>Portable propane heaters aren't recommended as they can create a risk to your business.</p>					
<p>If you plan to leave your property unoccupied for any period over the winter months do you:</p> <ul style="list-style-type: none"> • leave your heating in use or isolate the water supply and drain internal piping systems? • make sure your water pipes and tanks are fully and appropriately lagged? • find your stopcock and make sure it can be turned on and off easily? • repair leaking taps, fittings and pipes? 					