

Damp and Mould

A Surveyor's Perspective

Itinerary

- Historical perspective
- The Rochdale case
- A typical survey
- Focus on defects
- Discussion



Great Fire of London 1666

- Impact
- 1667 Rebuilding Act - restricted timber
- Walling to be 1 hour
- Hydrants



Ronan Point 1968

- Impact
- Progressive collapse
- Precast concrete
- Gas supplies



Summerland 1973

- Impact
- Compartmentation
- Acrylic cladding
- Fire escape routes
- Automated detection



Grenfell Tower 2017

- Impact
- Cladding
- Fire doors
- Single staircase
- Approval regime



Awaab Ishak 2020



Coroner & Ombudsman's Response

- A defining moment for the housing sector
- How in the UK does a 2 year old die from mould
- No longer stand for landlords failing their tenants
- Zero tolerance approach to damp and mould
- Treat residents with respect and empathy
- Avoid apportioning blame

A Typical Survey

- History
- Listen
- Examine
- Follow the trail
- Record data
- Implement
- Follow up



Mould Approach

- Building defect?
- Ventilation
- Heating
- Zero tolerance
- Mould clean always



Analogies



Typical Issues

- Trickle Vents
- are intended to be left open
- check number, size and condition
- kitchen/living rooms – min 3no



Exposure - CWI

Diagram 12 UK zones for exposure to driving rain



WALLS ONLINE VERSION

Table 4 Maximum recommended exposure zones for insulated masonry walls

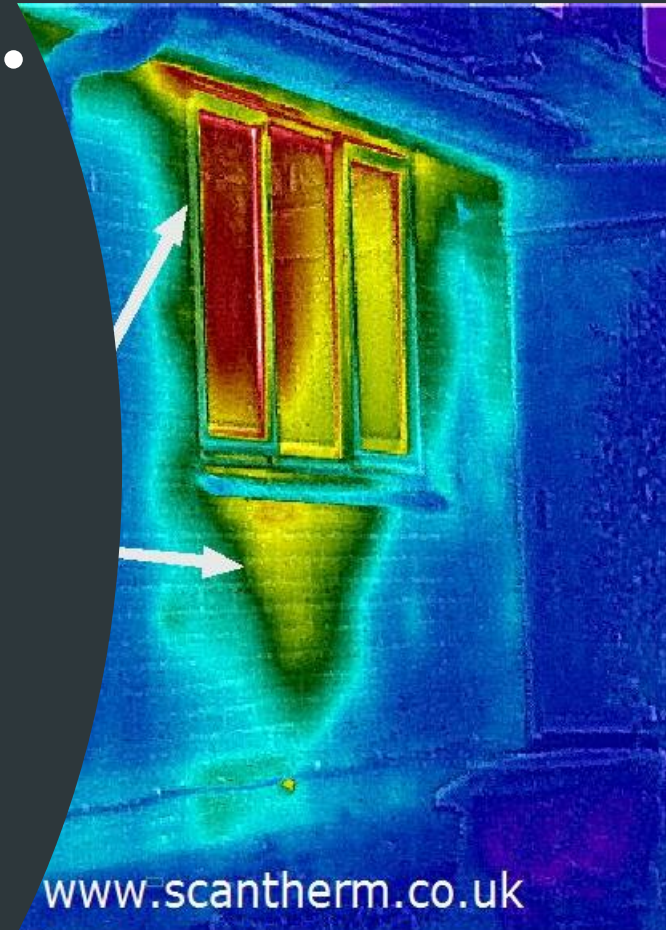
Insulation method	Min. width of filled or clear cavity (mm)	Maximum recommended exposure zone for each construction						
		Impervious cladding		Rendered finish		Facing masonry		
		Full height of wall	Above facing masonry	Full height of wall	Above facing masonry	Tooled flush joints	Recessed mortar joints	
Built-in full fill	50	4	3	3	3	2	1	
	75	4	3	4	3	3	1	
	100	4	4	4	3	3	1	
	125	4	4	4	3	3	1	
	150	4	4	4	4	4	1	
Injected fill not UF foam	50	4	2	3	2	2	1	
	75	4	3	4	3	3	1	
	100	4	3	4	3	3	1	
	125	4	4	4	3	3	1	
	150	4	4	4	4	4	1	
Injected fill UF foam	50	4	2	3	2	1	1	
	75	4	2	3	2	2	1	
	100	4	2	3	2	2	1	
Partial fill	Residual 50mm cavity	50	4	4	4	4	3	1
	Residual 75mm cavity	75	4	4	4	4	4	1
	Residual 100mm cavity	100	4	4	4	4	4	2
Internal insulation	Clear cavity 50mm	50	4	3	4	3	3	1
	Clear cavity 100mm	100	4	4	4	4	4	2
	Fully filled cavity 50mm	50	4	3	3	3	2	1
	Fully filled cavity 100mm	100	4	4	4	3	3	1

5.16 If the map given in Diagram 12 is used, determine the national exposure and, where appropriate, apply the following modifiers:

- i. where local conditions accentuate wind effects, such as open hillsides or valleys where the wind is funnelled onto the wall, add one to this exposure zone value;
- ii. where walls do not face into the prevailing wind, subtract one from this exposure zone value.

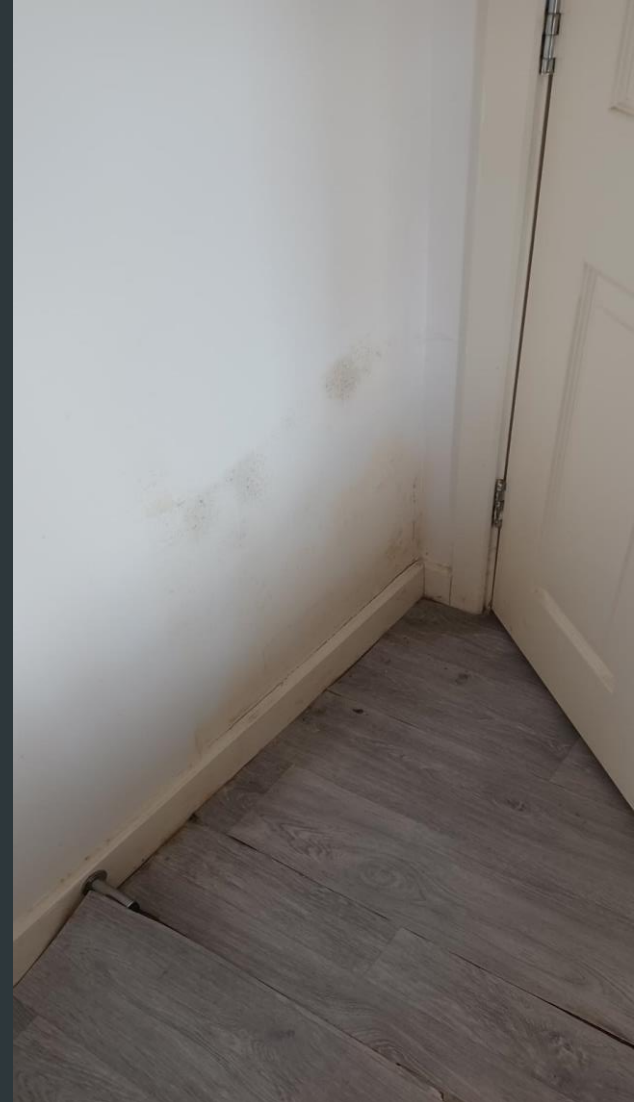
(The national exposure zone value can be accurately calculated from the larger scale and correction factors given in BS 8104.)

CWI – Practical Issues



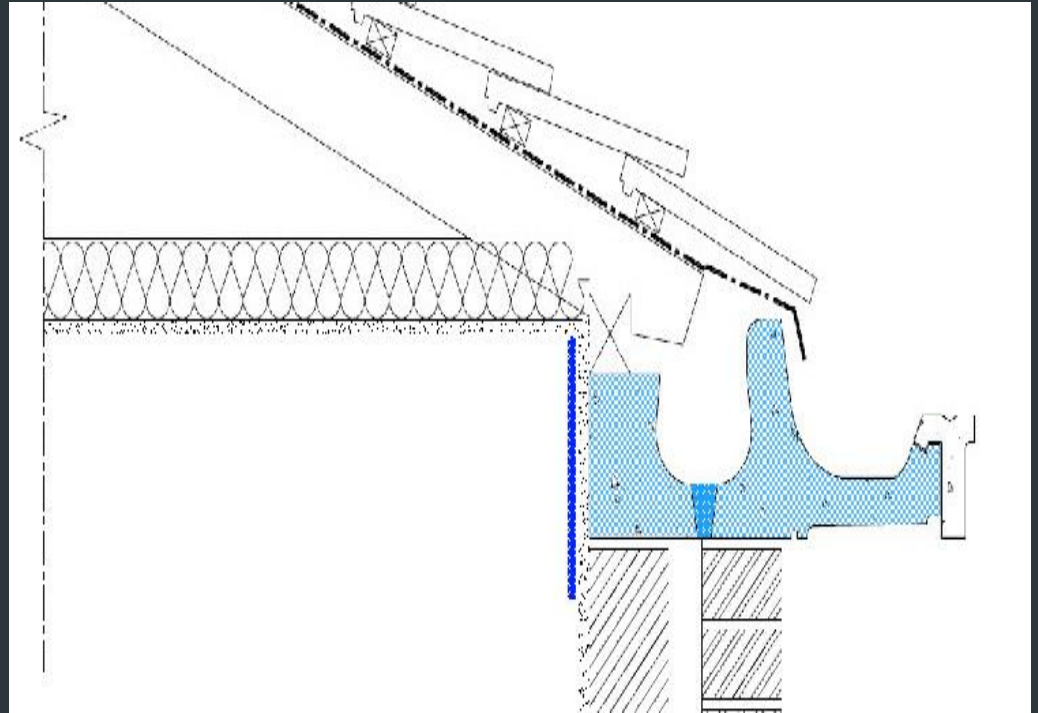
CWI - considerations

- Is the walling suitable to insulate
- Consider typography and condition
- Check injection holes
- Are there cold spots due to failure, water penetration or slumping
- If so, removal is necessary and dry out
- Reinjection?



Cold Bridging

- Examples
- Concrete finlock
- gutters – band of
- mould on inside
- face



Cold Bridging



Cold Bridging



Lockdown Projects

