

Building Control Officers Perspective

IBCI Building Control Conference 2019

The Lyrath Estate, Paulstown Road, Kilkenny

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Outline of Presentation

- Building Control in Cork City Council
- Building Control Activity Cork City
- Building Control Reforms 2014 - 2019
- Common Non-Compliances Observed
- Building Control Site Inspections Parts A-M
- Concerns & Challenges

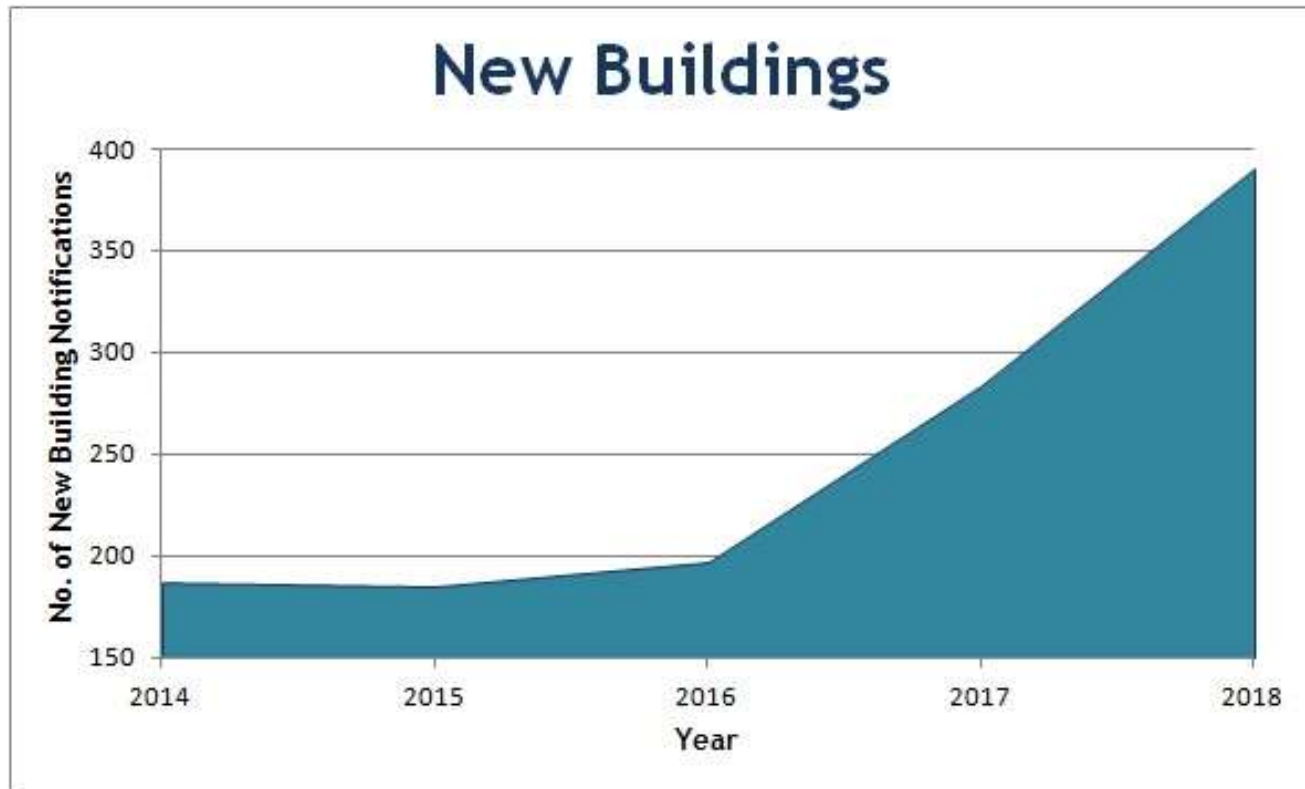
Building Control in Cork City Council

- Building Control Oversight and Enforcement
- Disability Access Certificates
- Dangerous Structures
- Adaptation Grants, Mobility Grants and Housing Aids for Older People
- Housing condition surveys for Property and Housing Directorates
- Construction Products Regulations
- Energy Performance of Buildings
- Advising on major indoor and outdoor events

Building Control Activity Cork City



Building Control Activity Cork City



Building Control Reforms 2014-2019



Comhairle Cathrach
Bhaile Átha Cliath
Dublin City Council



An Roinn Títhíochta, Pleanála
agus Rialtais Áitúil
Department of Housing, Planning
and Local Government

- “Vision” - Promote a Culture of Compliance with the Building Regulations
- Significant progress and positive change
- BCAR 2014 - 2018
- National Building Control Office & NBCMP
- 4 Pillars – Training, Compliance and Support, BCMS, Inspections
- Boards, Working Groups & Regional Building Control Groups, Email campaigns / notifications
- CIRI Register

Most Common Construction Defects Observed by Cork City Council

- Wall ties – No.'s of, Spacing, Openings, Workmanship.... (Part A, D)
- Design and detailing of structural timber/steel/concrete/timber frame (Part A, B, D, E)
- Lateral support to Floors/Roof level – strapping (Part A)
- Ventilation – Lack of!, Design of, airtightness, roof voids (Part F, L)
- Guarding design at windows low level cills (Part K)
- Notching and drilling of floor joists (Part A)
- Fire stopping, protected stairways, party wall and floor detailing, cavity barriers, Fire detection and alarm system, windows for escape and rescue (Part B, E)
- Damp proof courses, Radon barriers, underfloor fill, incorrect materials, weepholes in brickwork (Part C, D)
- Part L design?, Insulation continuity and detailing, thermal bridging (Part L)
- Drainage– design of! Housing schemes, bedding material, access and maintenance, ventilation (Part H & D)
- Carbon Monoxide Alarms, design of flues, ventilation.... (Part J)
- Accessible entrances and ramps, accessible WC, Visual contrast, handrailing and steps (Part M)

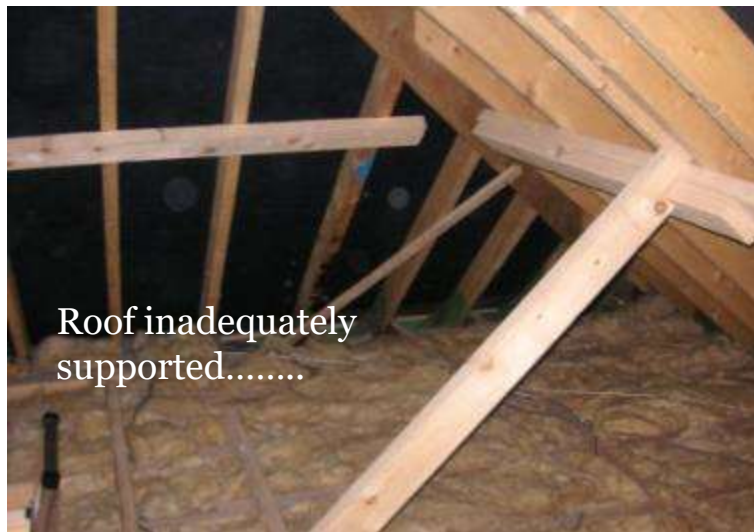


Building Control Site Inspections

Part A - Structure



Steel UB bolted to rising wall blockwork.....
Not foundation or concrete pad!



Roof inadequately supported.....



New extension built on existing stone walls – Note gaps to blockwork existing rafters.....

Part A - Structure



Part B - Fire Safety



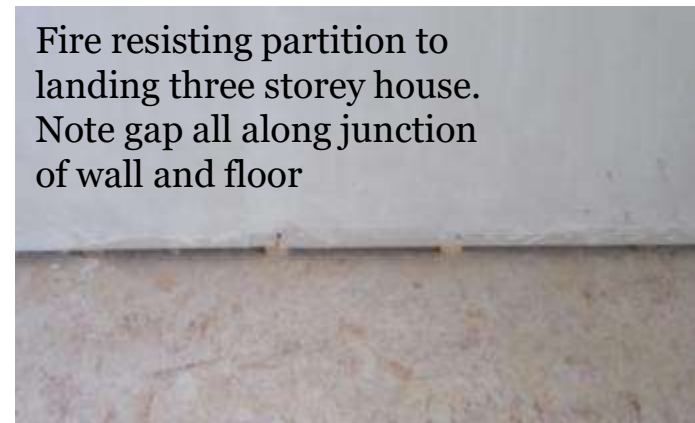
Party wall fire stopping –
Note large gap



Timber frame party wall –
Detail! Note gaps, Joints not
staggered, poorly
Fixed, not taped and
jointed...



Escape / rescue window to
bedroom...low level sill...no
guarding or window
restrictor



Fire resisting partition to
landing three storey house.
Note gap all along junction
of wall and floor

Part B - Fire Safety



Three storey house – hall into kitchen – no fire door



The leaning tower of fire hydrants!!!



Compartment Floor detailing.....



Blockwork party wall – Large gaps.....

Part C - Site Preparation & Resistance to Moisture



Large holes to radon barrier all along subfloor to new build house



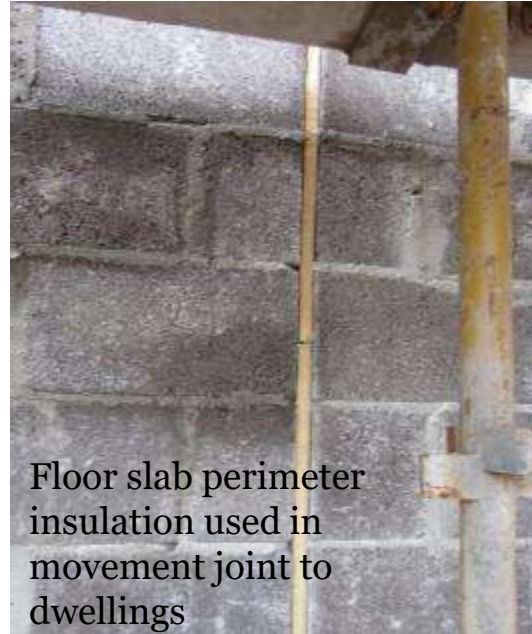
Suitable hardcore material?
Extension to dwellinghouse

Part D - Materials & Workmanship

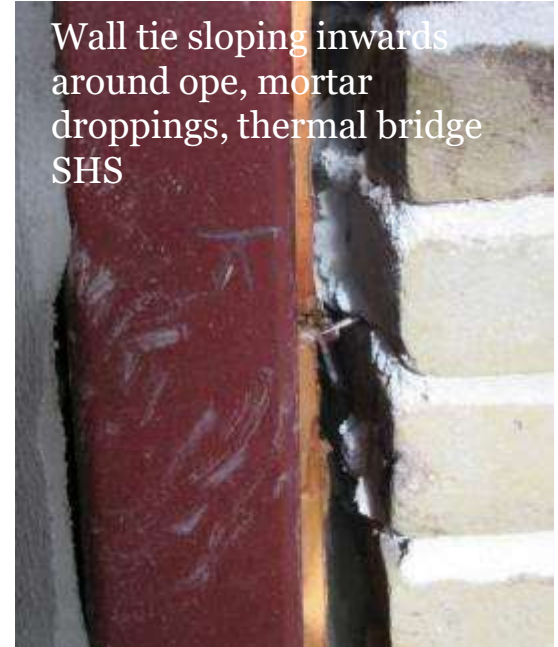
Branch pipe from WC
second floor – supported by
Block of insulation



Floor slab perimeter
insulation used in
movement joint to
dwellings



Wall tie sloping inwards
around ope, mortar
droppings, thermal bridge
SHS



Solar panel pipework from
garage into house used as a
step!



Water supply into
dwellinghouse at reveal



Part E - Sound

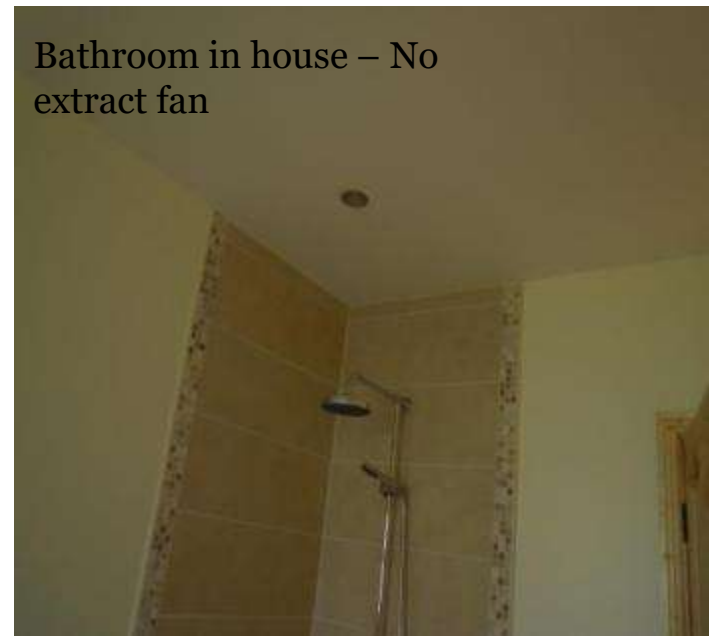


Party wall – Structural steel built into....sound transmission, risk of fire spread....



Party wall – Joists built into....sound transmission, risk of fire spread.....

Part F - Ventilation



Part G - Hygiene



Uninsulated storage tank in attic space – house occupied. No insulation to attic



Kitchen

Toilet

Part H - Drainage & Wastewater Disposal



Part J - Heat Producing Appliances

Flue from stove below in children's wardrobe on first floor



5m Flue complete with TV aerial.....



Not sure anybody thought about maintenance.....

Part K - Stairways, Ladders, Ramps & Guards



No Guarding to escape /
rescue window
dwellinghouse



No Guarding to stairs –
public building

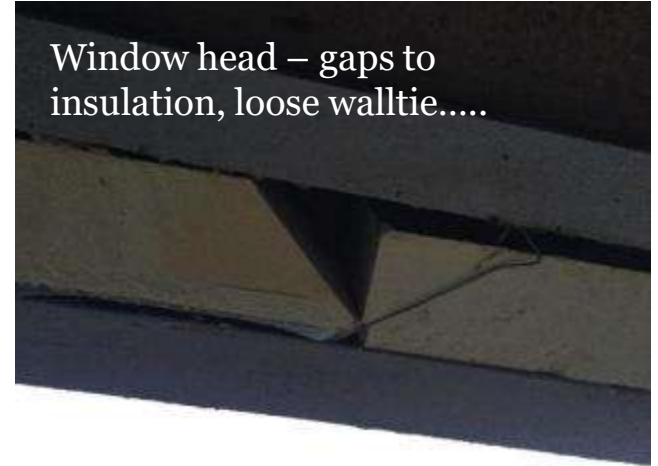


No Guarding to escape /
rescue window
dwellinghouse

Part L - Conservation of Fuel & Energy



Ready for window board!



Window head – gaps to insulation, loose walltie....



Bay window – gaps to insulation



Thermal bridge issue
concrete beam cavity
closer!

Part M - Access & Use



Part M - Access & Use



Accessible WC dwelling –
door swings in, no space
around WC, clear space
750x1200mm.....



Visual contrast - WC,
WHB, grab rails and wall
tiles

Concerns & Challenges

- Developers, Builders, Designers and Certifiers in a hurry again!! Tight construction programmes, volume against quality – paper compliance.....
- Noticing a concerning drop in:
 - The quality of BCMS submissions including drawings and details (fit for construction/showing compliance!)
 - In construction methods and workmanship and non-compliances with the Building Regulations in some projects inspected
- Fall of in respect generally for BCAR in some quarters?
- Exponential growth in construction output, Methods of Construction, Complexity & Scale of projects, NZEB, Modular Build etc
- Resourcing and Funding of Building Control Inspections (NOAC PI - 10% in 2018 CCC)
- Effective and efficient enforcement function – Requires High Level of Oversight & Inspections

Thank You

