Irish Building Control Institute
Annual Conference 2013

20-21st March 2013
Presentation Overview

A sample of current issues that concern those who work in Building Control and related areas

- TGD Part J review
- TGD Part K review
- Contradictions between current TGDs Part K and M
- Disability Access Certificates (DACs) miscellaneous issues
- Housing Adaptation Grants (HAGs)

- Present TGD Part J exists since 1997
- DECLG embarked on a review in mid 2012
- LA submissions on draft to DECLG by Nov 2012

Concern:
High level of complaints regarding passage of Products of Combustion (POC) from adjacent properties into homes. Queries regarding health, fuel types, flue locations, enforcement and nuisance.

- Requirements for compliance are relatively low
- What LA is going to take BC enforcement for non-compliance
- What LA wants to get involved in neighbour disputes?
Discharge of products of combustion.

A heat producing appliance shall have adequate provision for the discharge of the products of combustion to the outside air.
Outlet of a chimney or a flue pipe to be not less than 1 m above the highest point of contact of chimney and roof. Where the roof has a pitch of more than 10° on both sides and the outlet is at the ridge or within 600 mm of it, the height of the chimney or flue pipe may be reduced to 600 mm.

Diagram 1: Outlets from flues

- Not less than 1 m
- Greater than 10°
- Not less than 600 mm
The outlet of a chimney or flue pipe should also be not less than 1 m above the top of any opening skylight, opening window or wall ventilator within 2.3 m.

(b) HEIGHT OF FLUE OVER OPENINGS

The outlet of a chimney or a flue pipe in relation to adjacent or adjoining buildings should be as shown below.

(c) HEIGHT OF FLUE OVER ADJACENT OR ADJOINING BUILDING
TGD Part J review (cont)

Possible solutions and matters to be considered in the review.

- Broadening of the J2 definitions to include the effect on neighbouring properties
- Revisions to Diagram 1: Perhaps use the same format used in Diagrams 14 and 15 (incl. Table 5)
- Consideration of the effects of single storey extensions with combustion appliances and conventional or balanced flues on own or neighbours properties in two storey blocks.
- Requirement for the structural design of masonry chimneys (see TGD A 1.1.4.1)
- Consideration of effects of prevailing winds and downdraught.
- Highly efficient heat producing appliances (incl. wood burning stoves and ranges) and the resultant low temperature of the POC plume.
- Range of materials likely to be used for flue construction and the need to design in accordance with the relevant Code of Practice
- Types of fuels likely to be used in stoves, ranges and open fires
- Do not limit consideration to openable windows and vents. Include permanent vents in windows and along eaves.
Diagram 14 Location of flue outlets for gas appliances

*Par 3.6.4*

No chimney should penetrate area within shaded area around rooflight

Guttering

Car ports shall have two open unobstructed sides
Diagram 15 (a) Gas flue terminals exiting through or adjacent to roof

Par 3.6.4

PITCHED ROOF NOT EXCEEDING 45°. SHOWING EXTERNAL AND INTERNAL FLUES AND RIDGE TERMINATION.

FLAT ROOF WITH PARAPET

(NOTE: FOR PITCHES BETWEEN 45° & 60° THE FLUE SHOULD EXTEND 1000 mm ABOVE THE INTERSECTION WITH THE ROOF.)
### Table 5

**Flue Terminal Locations**

*(see diagram 14)*

<table>
<thead>
<tr>
<th>Terminal position All dimensions in mm</th>
<th>REF. Dimension</th>
<th>Room sealed</th>
<th>Open Flues</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Natural Draught</td>
<td>Fanned Draught</td>
</tr>
<tr>
<td>Directly below opening vent, window, air brick, etc.</td>
<td>A*</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Below gutters, soil pipes</td>
<td>B</td>
<td>300</td>
<td>75</td>
</tr>
<tr>
<td>Below eaves</td>
<td>C</td>
<td>300</td>
<td>200</td>
</tr>
<tr>
<td>Below balconies, car port roof</td>
<td>D</td>
<td>600</td>
<td>200</td>
</tr>
<tr>
<td>From a vertical drain/soil pipe</td>
<td>E</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>From an internal/external corner</td>
<td>F</td>
<td>600</td>
<td>300</td>
</tr>
<tr>
<td>Above ground roof or balcony level</td>
<td>G*</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>From a surface facing a terminal</td>
<td>H*</td>
<td>600</td>
<td>600</td>
</tr>
<tr>
<td>From a terminal facing a terminal</td>
<td>I*</td>
<td>600</td>
<td>1200</td>
</tr>
<tr>
<td>From an opening in a car port into a dwelling</td>
<td>J*</td>
<td>1200</td>
<td>1200</td>
</tr>
<tr>
<td>Vertical from a terminal on the same wall</td>
<td>K*</td>
<td>1500</td>
<td>1500</td>
</tr>
<tr>
<td>Horizontal from a terminal on the same wall</td>
<td>L*</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>From the wall on which the terminal is mounted</td>
<td>M</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>From a vertical structure on the roof</td>
<td>N</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Above intersection with the roof</td>
<td>P</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Below horizontal hinged window</td>
<td>Q*</td>
<td>1000</td>
<td>3000 Where the exhaust is directly upwards, Otherwise 1000</td>
</tr>
<tr>
<td>Horizontal from door, window, vent or air brick</td>
<td>R*</td>
<td>300</td>
<td>300</td>
</tr>
</tbody>
</table>
Technical Guidance Document (TGD K) Review

- Pre-draft review document was issued in 2011
- No formal draft document issued to date

Regulations:

Protection from falling. K2

In a building, the sides of every floor and balcony and every part of a roof to which people normally have access shall be guarded to protect users from the risk of falling therefrom.

Vehicle ramps, floors and roofs. K3

In a building, the sides of every vehicle ramp and every floor and roof to which vehicles have access shall be guarded against the risk of vehicles falling therefrom.
Pedestrian Guarding

2.2 Guarding should be provided to the sides of any part of a raised floor, gallery, balcony, roof or any other place to which people have access (unless access is only for the purpose of maintenance or repair). Guarding should also be provided to the sides of raised floors of vehicle parks in buildings, ramps used for vehicle access, sunken areas next to buildings and any similar area where it is necessary for the safety of persons in or about a building. Guarding may not be essential where the total difference in levels is 600 mm or less. Guarding need not be provided to places such as a loading bay or a stage where it would be incompatible with normal use.
TGD K v TGD M
TGD K v TGD M
TGD K v TGD M

Ramp Lengths

1.2.1 A ramp should be so constructed that the slope does not exceed 1:20, except in the case of an individual flight the length of which is not greater than 9 m, when the slope may be greater. Under no circumstances should the slope exceed 1:12.

Part M Approach to a building other than a dwelling

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Limits for ramp gradients and lengths</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maximum going of a flight</strong></td>
<td><strong>Maximum gradient</strong></td>
</tr>
<tr>
<td>Not exceeding 10 m</td>
<td>1:20</td>
</tr>
<tr>
<td>Not exceeding 5 m</td>
<td>1:15</td>
</tr>
<tr>
<td>Not exceeding 2 m</td>
<td>1:12</td>
</tr>
</tbody>
</table>

**NOTE:** For goings between 2 m and 10 m, it is acceptable to interpolate between the maximum gradients (refer to Diagram 3).
Diagram 3  Relationship between ramp gradient and the maximum going of a flight

NOTE: Where space permits, the gentlest possible gradient should be chosen i.e. the shallowest possible gradient between 1:12 and 1:20
Dished crossings

Dished crossings should be provided at all crossing points whether controlled or not. They will assist cyclists, people in wheelchairs and people with prams and pushchairs. A ramp slope of 1 in 20 is desirable, where possible but it should not be steeper than 1 in 12.
Geometry

2.10 When assigning geometric parameters to footways the comfort of the user is taken into account, together with the necessity for providing adequate surface drainage. Steep gradients or crossfalls make it difficult for elderly or encumbered pedestrians to walk on the footway, while insufficient gradients would not facilitate the removal of surface water. Where possible the footway width should be sufficient to allow two wheelchairs or double buggies to pass. The basic geometrical parameters are set out in Table 2.3.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Recommended Limits</th>
<th>Extreme Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Longitudinal gradient</td>
<td>1.25% to 5%</td>
<td>8% maximum*</td>
</tr>
<tr>
<td>(normally the same as adjacent highway)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width</td>
<td>2m minimum</td>
<td>1.3m minimum</td>
</tr>
<tr>
<td>Crossfall</td>
<td>2% to 3.3%</td>
<td>1.5% minimum to 7% maximum at crossings</td>
</tr>
</tbody>
</table>

Note: *In some cases it may be necessary to construct a footway with a gradient of more than 8 per cent. Provision of a handrail is recommended if site constraints necessitate a gradient steeper than 10 per cent.
Disability Access Certificates

- Exemptions
- Two stage assessment
- Partial grants of DAC’s
- Multi DAC’s in one building
- WC provision assessment / travel distance
- Independent Disabled access / egress
Disability Access Certificates
Disability Access Certificates
Disability Access Certificates

Church and ancillary buildings

Classrooms

Auditorium

Sports Hall / Changing Rooms
Disability Access Certificates

Conversion of former stable building to community meeting space
Housing Adaptation Grant – Example 1

**Occupancy:**
elderly couple, grown up daughter and adult grand-daughter.

**O/T’s recommendations:**
- Wheelchair accessible bedroom / shower room
- Ramped access at rear
- Internal ramp at change in floor level

**Deficiencies:**
- Change in floor level
- Route from bedrooms to family bathroom through lounge
Housing Adaptation Grant – Example 1

Plan Submitted
None of identified deficiencies resolved

Lowest estimate submitted: €35,722.47
Plan Approved.

- Level access throughout
- Independent circulation front to rear
- Family bathroom central and accessible from hallway
- Family bathroom and en-suite shower room adjacent – simplifies drainage / plumbing

Lowest estimate submitted: €42,800.00
Occupancy:
One elderly lady

O/T’s recommendations:
• Platform lift from garage to house
• Extend wc cubicle by 500mm; relocate wc; re-hang door to open out
• Widen kitchen/utility door
• Provide low threshold door and ramped access to rear garden

Lowest estimate submitted:
€17,800.00
Plan Approved

- Build concrete platform/steps with handrail at garage/house door
- Install straight stairlift
- Other works as o/t recommended

Lowest estimate submitted: €12,600.00

Grant approved: €10,700.00