

15th International Housing & Home Warranty Conference Dublin, Ireland | 20 - 25 Sept. 2020



BUILDING HOMES FOR TOMORROW



SAVE THE DATE



PROGRAMME

- SUNDAY ARRIVAL / GOLF
- MONDAY OPENING CEREMONY /
 SEPT 21 PLENARY SESSIONS
- TUESDAY CONCURRENT SEPT 22 SESSIONS
- WEDNESDAY SEPT 23
 CONCURRENT SESSIONS / CLOSING CEREMONY
- THURSDAY SOCIAL / TECHNICAL SEPT 24 TRIP
- FRIDAY SEPT 25 DEPARTURE

- AGENDA
- CONSTRUCTION CODES & STANDARDS
- BUILDING QUALITY
- HOUSING AFFORDABILITY
- SUSTAINABILITY
- CONSTRUCTION TECHNOLOGY
- SOCIAL HOUSING
 - HOUSING ECONOMICS
 - WORKFORCE DEVELOPMENT
 - GOVERNMENT REGULATION
 - MARKET INTELLIGENCE

to make. It is vital refore that this asset is rotected.

- HomeBond -

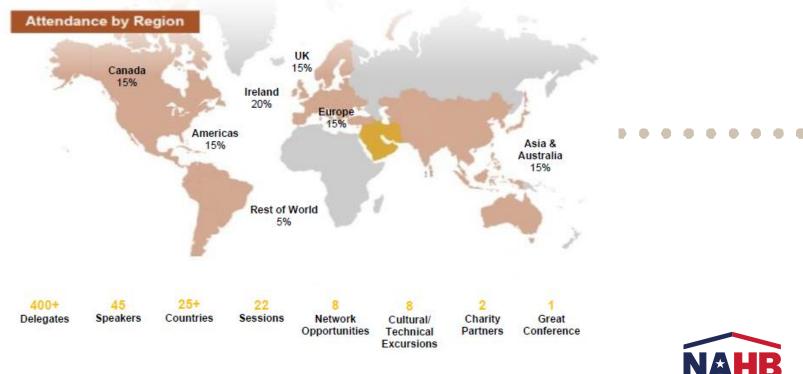
For more information about the conference, including registration and social events, please contact

HomeBond +353 1 491 5000 linfo@homebond.ie www.homebond.ie





EXPECTED CONFERENCE ATTENDANCE



National Association of Home Builders

Modern Methods of Construction

BUILDING TYPOLOGY

- > Houses
- > Low rise apartments (<5 storeys)
- > Mid rise apartments (6-9 storeys)
- > High rise apartments 10 storeys and above

MATERIAL GENRE

- > Mass engineered timber (MET)
- > Timber framed (TF)
- > Light gauge steel framed (LGS)
- > Hot rolled fabricated steel (HRS)
- > Hot rolled / light gauge steel combination (SC)
- > Concrete & cement derived (C)
- > Timber framed / concrete combination (TFC)



MMC - Categories







systems)

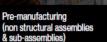


Pre-manufacturing components (non-systemised primary structure)



Additive manufacturing (structural and non-structural)







Traditional building product led site labour reduction / productivity improvements



Site process led site labour reduction / productivity / assurance improvements



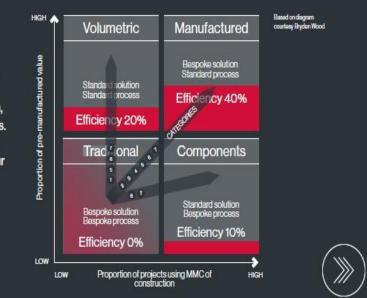
MMC - Categories





······ Pre-Manufactured Value

There are multiple routes to increasing the PMV of a project. The PMV is measuring the proportion of a project made up of on-site labour, supervision, plant and temporary works. Increasing manufacturing and/or reducing site labour can both be applied to improve PMV.





HOUSING STATISTICS - IRELAND

Annual Housing Starts:	Percentages:	Numbers:
- Single Family Homes	84	15,200
- Multifamily Homes	16	2,900
Total Housing Stock		2,003,645
Median House Price		€236,287
Home Ownership Rate	69.5	
Home Mortgage Interest	4.35 (15 yrs)	
House Price Index	2.0	
Housing Deficit (Undersupply or Oversupply)		-15,000 / yr



······ AFFORDABILITY





BREXIT TIGER





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All parties must be registered with Local Authority

REGISTERED PROFESSIONALS

• Registered Architect (Part 3 BCA 2007)

- Registered Building Surveyor (Part 5 BCA 2007)
- Chartered Engineer (Section 7 ICEIA 1969)

Reasonable Skill, Care & Diligence



BUILDING CONTROL

- 1. Certificate of Compliance (Design), confirming compliance with the statutory requirements of the Building Regulations
- 2. Lodgment of drawings, specifications
- 3. Notice of Assignment + Undertaking builder, professional
- 4. Obligation to notify BCA change of owner/builder/professional
- 5. Code of Practice Inspection Plan
- 6. Certificate of Compliance (Completion), confirming compliance with the statutory requirements of the Building Regulations
- 7. The <u>lodgment of drawings at completion</u> of construction, demonstrating how the building has been designed and built to comply with all parts of the Building Regulations (if different from design)



8. BCMS to be used.

· BUILDING REGULATIONS









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CONSUMER CONFIDENCE **Conceptio**n **Accountability Quality Control** 2nd Filoor Confidence



ENERGY

- Provides an improvement in performance in the order of 60% over 2008 TGD L
- Improved Fabric Specification
- Advanced Services and Lighting
- Renewable Energy Ratio of 20%
- NZEB Nearly Zero Energy Building BER Rating A2 = 25kWh/m²/yr





EXISTING DWELLINGS

- Major Renovations "more than 25% of the surface area of the building thermal envelope undergoes renovation"
- BER Rating B3 (125kWh/m²/yr)

 where technically, functionally and economically feasible





VENTILATION

- The average A-weighted sound pressure level in <u>noise sensitive rooms such as</u> <u>bedrooms and living rooms</u> should **not exceed 30 dB** LAeqT. In less sensitive rooms such as <u>kitchens and bathrooms</u> noise level should **not exceed 35 dB**
- TR/35 provides guidance on good practice for sizing and installation of ductwork. Installed, balanced and commissioned by competent installers
- Natural ventilation rates increased





- a) CE Marking
- b) Harmonised Standard (hEN) or European Technical Assessment (ETA)
- c) Irish Standard or
 Irish Agrement Certificate or
 Alternative National Technical Specification

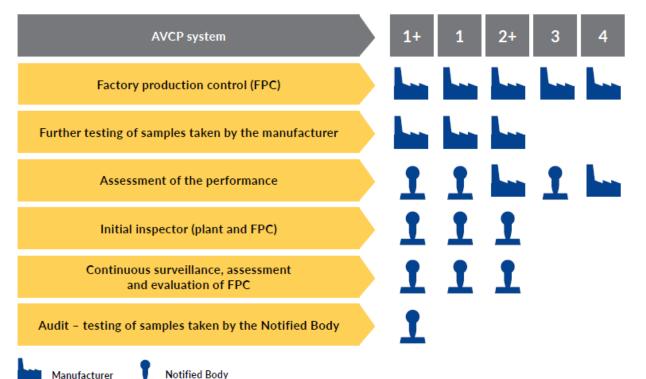
Construction Products Regulation (EU No. 305/2011)



Table 1. Extract from Annex IV of Regulation (EU) No. 305/2011			
CODE	PRODUCT AREA		
1	PRECAST NORMAL/LIGHTWEIGHT/AUTOCLAVED AERATED CONCRETE PRODUCTS.		
2	DOORS, WINDOWS, SHUTTERS, GATES AND RELATED BUILDING HARDWARE.		
3	MEMBRANES, INCLUDING LIQUID APPLIED AND KITS (FOR WATER AND/OR WATER VAPOUR CONTROL).		
4	THERMAL INSULATION PRODUCTS. COMPOSITE INSULATING KITS/SYSTEMS.		
5	STRUCTURAL BEARINGS. PINS FOR STRUCTURAL JOINTS.		
6	CHIMNEYS, FLUES AND SPECIFIC PRODUCTS.		
7	GYPSUM PRODUCTS.		
8	GEOTEXTILES, GEOMEMBRANES, AND RELATED PRODUCTS.		
9	CURTAIN WALLING/CLADDING/STRUCTURAL SEALANT GLAZING.		
10	FIXED FIRE FIGHTING EQUIPMENT (FIRE ALARM/DETECTION, FIXED FIREFIGHTING, FIRE AND SMOKE CONTROL AND EXPLOSION SUPPRESSION PRODUCT).		
11	SANITARY APPLIANCES.		
12	CIRCULATION FIXTURES: ROAD EQUIPMENT.		
13	STRUCTURAL TIMBER PRODUCTS/ELEMENTS AND ANCILLARIES.		
14	WOOD BASED PANELS AND ELEMENTS.		
15	CEMENT, BUILDING LIMES AND OTHER HYDRAULIC BINDERS.		
16	REINFORCING AND PRESTRESSING STEEL FOR CONCRETE (AND ANCILLARIES). POST TENSIONING KITS.		

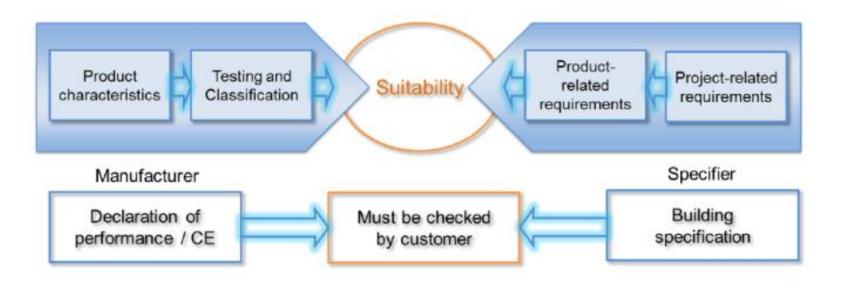


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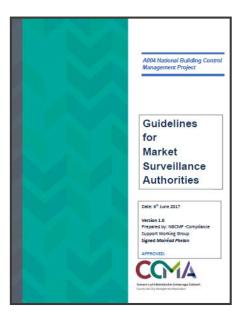
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MARKET SURVEILLANCE





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Construction Products Regulation (EU) 305/2011 Marketing		Building Control Acts 1990 to 2014 Using	
Enforcement: Market Surveillance Authority		Building Control Authority	
Declared Performance <u>NOT</u> Quality		Performance suitable for end use	
-	tion product on the Market – ducts Regulation	Using a construction product in building works Building Regulations	
Harmonised European Product Standard (hEN) (i) Assessment o performance (ii) Verification o factory productio control European Assessment Document (EAD) (Voluntary)	F Performance (DOP)	Compliance with Building Regulations Construction products - fit for purpose & conditions of use - Part D WorkmanshiP	
Manufacturer/ Importer/Distributer		Owner/ Builder/ <u>Specifier</u> Designer/Certifier	

CONSTRUCTION DEFECTS

FAQ 36. What are the most common building defects observed by Building Control Authorities?

- 1. Underfloor fill- panel fixings, pyrite.. (Part A, C, D)
- 2. Moisture ingress-radon, dpc. (Part C)
- 3. Fire resistance-eaves, party walls, ducting (Part B)
- 4. Sound transmission,-flooring detail, insulation (Part E, L)
- 5. Condensation & mould growth (Part F)
- 6. Frozen pipes, attic tank, stopcocks (Part G)
- 7. Septic tanks overload, flooding (Part H)
- 8. Flues, location, size, burners (Part J)
- 9. Balcony, Stair rails-wrong height, glass (Part K)
- 10. Steps to entrances (Part M)
- 11. BER calculations don't exist, stud fixings, cavities clear of mortar (Part L)
- 12. Timber frame-fixings, vapour control, cavity barriers, fire stopping,
- Blocks with no certification (Part A,D)

24/11/2017- Review Mairéad Phelan





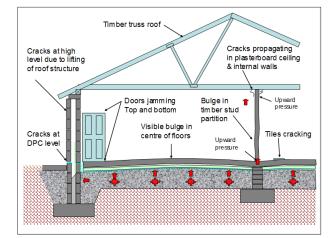




CONSTRUTION DEFECTS











AFTER GRENFELL - FIRE SAFETY





Nearly one fire a day in London involves white goods.





GUIDANCE - HOMEBOND





LATENT DEFECTS INSURANCE





UNRIVALLED PROTECTION **NEW HOMEOWNERS**



Lowest bundle price Latent Defects Insurance 🚾 & Building Control Services 🕬

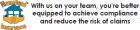
40 Years Experience, "A+" Rated Insurers

First Party Insurance Cover * (all valid claims by a homeowner are dealt with by the insurers)

In addition to providing Structural Insurance cover for 10 yrs and Smoke Penetration/ Water Ingress cover for 5 yrs , features include:

- over for 5 yrs 1. Physical Fire Safety defects cover for 5 yrs
- 2. Breaches of Building Regulations (damage) cover for 5 yrs
- 💰 3. Cover for the Purchasers' deposit paid on Contract of Sale
- 4. Mechanical & Electrical Equipment cover for 5 vrs
- 5. Alternative accommodation costs & professional fees included
- 6. Underwritten by "A+" Rated Insurers, excess only €650
- 7. Unique protection for builders and homeowners
- 8. No security required from the builder/ developer
- 9. Cover effective from date of substantial completion
- 🔬 10. Fixed price per dwelling

Quality insurance with unique cover advantages



equipped to achieve compliance and reduce the risk of claims



Design, Workmanship, Materials

Ní neart go cur le chéile