



Building Standards Technical Handbooks 2022 - Summary of changes for 1 June 2022 and 1 December 2022

A summary of changes included in the 2022 Building Standards Technical Handbooks, updating:

- Section 0 (general), Section 2 (Fire) and Appendix A (definitions), which apply from **1 June 2022**. These changes form part of the output from the Building Standards Fire Safety Review Panel and measures proposed within the [2021 consultation](#) on external wall systems .
- Section 0 (general), Section 3 (Environment), Section 6 (energy), Section 7 (Sustainability) and Appendix A (definitions), which apply from **1 December 2022**. These changes form part of the output from the Building Standards Energy Review Panel and measures proposed within the [2021 consultation](#) on energy standards and associated topics, including ventilation, overheating and electric vehicle charging infrastructure.

Please note that there are two editions of the 2022 Technical Handbooks Published – June 2022 (covering item a above) and December 2022 (covering both items (a) and (b) above). These are published at: <https://www.gov.scot/policies/building-standards/monitoring-improving-building-regulations/>

A full list of changes to standards and guidance clauses is also provided in the introductory part of each section of the Technical Handbooks.

Information on dissemination and awareness events are available at: .
<https://www.gov.scot/publications/building-standards-technical-handbooks-2022/>

Changes to regulations and standards

Amendments to the building regulations and standards are now made by Part 2 of [The Building \(Scotland\) Amendment Regulations 2022](#). The main changes introduced by the 2022 edition are amendments to regulations and standards that relate to external wall cladding systems and energy performance, as follows:

Section 0 (general)

- Regulation 8 relating to durability, workmanship and fitness of materials is amended to ban the use of highly combustible metal composite material in an external wall cladding system or as an internal lining ([from June 2022](#)).
- Regulation 8 is amended to ban the use of combustible materials in external wall cladding systems on dwellings and on other defined 'relevant buildings' with a storey at a height of 11 metres or more ([from June 2022](#)).
- Amendment of Schedule 3 to Regulation 5 relating to descriptions of building and work, including the provision of services, fittings and equipment, not requiring a warrant to control the use of combustible materials in the replacement of external

wall cladding systems, other than minor repairs ([from June 2022](#)).

- Introduction of new standard 3.28 to schedule 6 (building standards applicable to design and construction) and schedule 6 (building standards applicable to conversions) ([from December 2022](#)).

Section 2 (fire)

- Amendment to building standard 2.7 relating to the spread of fire on external walls to clarify the intent of the standard ([from June 2022](#)).

Section 6 (energy)

- Standard 6.1 renamed “Energy demand and carbon dioxide emissions”; scope extended to cover energy demand; standard no longer applies to buildings without ‘direct emissions heating systems’ ([from December 2022](#)).
- Standard 6.7 (commissioning building services) amended to cover ‘control systems’ and ‘effective operation’ as a function of commissioning ([from December 2022](#)).

Annex A

- Introduction of a definition for ‘direct emissions heating system’ ([from December 2022](#)).

Section 0 (general) from 1 June 2022

Changes listed are to both the Domestic and Non-domestic Technical Handbooks.

- 0.2.1 – Updated list of amended legislation – 2022 regulations added.

Section 0.5 – Regulation 5. Buildings work, services, fittings and equipment not requiring a warrant.

Schedule 3 amended to now require replacement of cladding to meet current regulations and be the subject of a building warrant. Excepting minor repairs (defined) to cladding which may still be made on a like-for like basis and do not require a building warrant.

- Clause 0.5.1 – guidance on work types 1, 17 and 25 amended to reflect changes to schedule 3.
- Schedule 3, Type 17 – exception amended to relate works to external wall cladding systems.
- Schedule 3, Type 25 – work associated with cladding removed from the list of works which can be to a standard no worse than at present and which does not require a building warrant.
- Schedule 3, Type 25A – new type added to cover extent of cladding replacement (minor repair) which can be to a standard no worse than at present and which does not require a building warrant.

Section 0.8 – Regulation 8. Durability, workmanship and fitness of materials

Regulation 8 – Amended to prohibit the use of highly combustible metal composite material panels and fire performance criteria for parts of an external wall cladding system.

- Regulation 8(3) added to require materials forming an ‘external wall cladding system’ or ‘specified attachments’ to be non-combustible in ‘relevant buildings’
- Regulation 8(4) added to list materials which are not subject to regulation 8(3).
- Regulation 8(5) added to prevent the use of ‘highly combustible metal composite material’ in external wall cladding systems or internal linings on all buildings.
- Regulation 8(6) added to define the terms ‘highly combustible metal composite material’, ‘relevant building’, ‘specified attachment’ and ‘substantial layer’.
- Clause 0.8.1 – New explanatory text added to explain the Regulation 8 changes made for external wall cladding systems and specified attachments.

Section 0 (general) from 1 December 2022

Changes listed are to both the Domestic and Non-domestic Technical Handbooks

- Regulation 12, Schedule 6 – new standard 3.28 (overheating) introduced. Application to conversions is as close to the requirement of that standard as is reasonably practicable.

Section 2 (fire) from 1 June 2022

Domestic handbook - guidance to standard 2.5 (internal linings)

- Reference to prohibition on the use of highly combustible metal composite material panels under regulation 8 added.

Domestic handbook - guidance to standard 2.6 (spread to neighbouring buildings)

- Reference to prohibition on the use of highly combustible metal composite material panels under regulation 8 added.
- Clause 2.6.4 – first paragraph replaced and guidance changed in accordance with Regulation 8 of the Building (Scotland) Amendment Regulations 2022

Domestic handbook - guidance to standard 2.7 (spread on external walls)

- Mandatory standard amended to clarify intent with regard to the height, use and position of the building.
- Reference to the prohibition of highly combustible metal composite cladding material panels under regulation 8 added.
- Meaning of external wall cladding systems explained.
- Additional guidance on awnings, canopies and signage provided.

Domestic handbook – Annex 2.B reaction to fire

- Clause 2.B.1 – clause re-written to provide additional guidance on external wall cladding systems including exemptions and the use of large scale fire testing.

Non Domestic handbook - guidance to standard 2.5 (internal linings)

- Reference to prohibition on the use of highly combustible metal composite material panels added.

Non Domestic handbook - guidance to standard 2.6 (spread to neighbouring buildings)

- Reference to prohibition on the use of highly combustible metal composite material panels added.
- Clause 2.6.4 – first paragraph replaced and guidance changed in accordance with Regulation 8 of the Building (Scotland) Amendment Regulations 2022

Non Domestic handbook - guidance to standard 2.7 (spread on external walls)

- Mandatory standard amended to clarify intent with regard to the height, use and position of the building.
- Reference to the prohibition of highly combustible metal composite cladding material panels added.
- Meaning of external wall cladding systems explained, clause re-written and table 2.9 amended to include Regulation 8 of the Building (Scotland) Amendment Regulations 2022.
- Additional guidance on awnings, canopies and signage provided.

Non Domestic handbook – Annex 2.E reaction to fire

- Clause 2.E.1 – clause re-written to provide additional guidance on external wall cladding systems including exemptions and the use of large scale fire testing.

Section 3 (environment) from 1 December 2022

Domestic handbook - guidance to standard 3.14 (ventilation)

- Clause 3.12.2 ventilation of dwellings. Guidance expanded to cover ventilation solutions for design infiltration levels and advice on whole dwelling ventilations rates.
- Clause 3.14.3 provision for purge ventilation. New clause expanding advice on openable ventilators previously in ‘ventilation of dwellings’.
- Clauses 3.12.4 to 3.12.6 – expanded guidance on the three principle options for ventilation of dwellings, relating solutions to design infiltration levels.
- Clause 3.14.8 commissioning and written information. New clause summarising provisions previously set out in the (referenced) domestic ventilation guide.

Domestic handbook – new standard 3.28 (overheating) and supporting guidance

- New standard and supporting guidance on assessment and mitigation of summer overheating risk in new dwellings introduced.

Domestic handbook – new Annex 3.A (domestic ventilation guide_

- New Annex added to the Domestic Handbook. This is an updated version of the ‘Domestic Ventilation Guide’ which was previously published as a separate document.

Non-domestic handbook - guidance to standard 3.14 (ventilation)

- Clause 3.14.8 commissioning and written information. New clause summarising provisions previously set out in the (referenced) domestic ventilation guide.

Domestic handbook – new standard 3.28 (overheating) and supporting guidance

- New standard and supporting guidance on assessment and mitigation of summer overheating risk in certain new residential buildings introduced.

Section 6 (energy) from 1 December 2022

Domestic handbook – standard 6.1 (energy demand and carbon dioxide emissions) and supporting guidance

- Standard 6.1 amended to introduce a delivered energy target for new buildings and to apply requirements to reduce carbon dioxide emission only to new buildings using direct emissions heating systems.
- Clause 6.1.1 – explanation of new energy target and exemption from TER for non-direct emission heating systems. Confirmation of application of SAP 10 as the current version of the UK assessment methodology.
- Clause 6.1.2 – Amendment to the notional buildings used to set compliance targets. Three variations on the notional building, applied based upon use of electric heat pump, heat network connection or any other heating solution.
- Clause 6.1.3 – explanation of revised treatment of the export component of on-site generation of power and of the amended approach to compliance for dwellings connected to a heat network.

Note: ‘Simplified approach’ to compliance with standard 6.1 (build to notional building specification, no SAP compliance calculation needed) is now removed as an option.

- Clause 6.2.1 – Area-weighted average U-values for elements of fabric improved; one set of values now apply to all building work. Option of demonstrating compliance of new buildings via ‘space heating demand limit’ set out.
- Clause 6.2.5 – airtightness testing now undertaken on each new dwelling. No exception for high infiltration dwellings. Test methodology refers to CIBSE TM 23.
- Clause 6.2.6 – reference now made to fabric values in clause 6.2.1 for conversion of heated and unheated buildings. A robust demonstration of ‘reasonably practicable’ solutions is sought.
- Clause 6.2.8, 6.2.10, 6.2.11 & 6.2.12 – reference now made to fabric values in clause 6.2.1 for extensions.
- Clause 6.3.1, 6.4.1, 6.5.1 & 6.6.2 – Reference now made to the 2022 Domestic Building Services
- Clause 6.6.1 – assessment of overheating risk now references provisions set out in standard 3.28 for dwellings.
- Standard 6.7 amended to include ‘control systems’ and commissioning extended to address effective operation of installed services.
- Clause 6.7.2 added on provision of a commissioning plan at design stage.
- Clause 6.7.3 added on provision of a commissioning report on completion of construction.
- Clause 6.8.2 updated to include information on avoiding overheating risk within the quick start guide.
- Clause 6.8.3 added setting out provisions for information to support retrofit of

direct emission heating systems.

- Previous Annex 6.A now deleted. Other annexes renumbered.
- Annex 6.A – Examples updated to reflect changes to guidance to standard 6.2.

Non-domestic handbook – standard 6.1 (energy demand and carbon dioxide emissions) and supporting guidance

- Standard 6.1 amended to introduce a delivered energy target for new buildings and to apply requirements to reduce carbon dioxide emission only to new buildings using direct emissions heating systems.
- Clause 6.1.1 – Confirmation of application of SBEM v.6 as the current version of the UK assessment methodology.
- Clause 6.1.2 – explanation of new energy target and exemption from TER for non-direct emission heating systems.
- Clause 6.1.4 – Amendment to the notional buildings used to set compliance targets. Three variations on the notional building, applied based upon use of electric heat pump, heat network connection or any other heating solution.
- Clause 6.1.6 – explanation of revised treatment of the export component of on-site generation of power and amended approach to heat network connections.
- Clause 6.1.8 – amended guidance on shell buildings, emphasising the application of a continuing requirement on fit-out and deferring EPC assessment until completion of fit-out.
- Clause 6.2.1 – Area-weighted average U-values for elements of fabric improved; one set of values now apply to all building work. Variant U-values for shell buildings no longer defined (clause removed).
- Clause 6.2.4 – Where input values not used, default allowance for thermal bridging in notional building amended.
- Clause 6.2.6 – reduced exceptions for testing of new buildings. Test methodology refers to is now CIBSE TM 23.
- Clause 6.2.7 – reference now made to fabric values in clause 6.2.1 for conversion of heated and unheated buildings. A robust demonstration of 'reasonably practicable' solutions is sought.
- Clause 6.2.8, 6.2.9 & 6.2.11 – qualified reference now made to fabric values in clause 6.2.1.
- Clause 6.3.1, 6.4.1, 6.5.1 & 6.6.2 – Reference now made to the 2022 Non-domestic Building Services Compliance Guide.
- Clause 6.6.1 – now references provisions set out in standard 3.28 for residential non-domestic buildings.
- Standard 6.7 amended to include 'control systems' and commissioning extended to address effective operation of installed services.
- Clause 6.7.2 added on provision of a commissioning plan at design stage.
- Clause 6.7.3 added on provision of a commissioning report on completion of construction.
- Clause 6.8.2 updated to include information on avoiding overheating risk within

the quick start guide.

- Clause 6.8.3 added setting out provisions for information to support retrofit of direct emission heating systems.
- Previous Annex 6.A now deleted. Other annexes renumbered.
- Annex 6.A – Examples updated to reflect changes to guidance to standard 6.2.
- Annex 6.B – Provisions specific to limited duration modular buildings updated.

Section 7 (sustainability) from 1 December 2022

Domestic handbook – standard 7.1 (sustainability) and supporting guidance

- Guidance on achieving Aspect 1 (Carbon Dioxide Emissions) updated to reflect 2022 emission standards ('Gold' level deemed to be achieved); References now made to SAP 10 as calculation methodology.

Domestic handbook – standard 7.1 (sustainability) and supporting guidance

- Guidance on achieving Aspect 1 (Carbon Dioxide Emissions) updated to reflect 2022 emission standards.

Appendix A (defined terms) from 1 June 2022

Changes listed are to both the Domestic and Non-domestic Technical Handbooks

- New Regulation 8 definitions included for 'highly combustible metal composite material', 'relevant building', 'specified attachment' and 'substantial layer'.
- 'Hospital' definition amended.

Appendix A (defined terms) from 1 December 2022

Changes listed are to both the Domestic and Non-domestic Technical Handbooks

- New definition 'direct emissions heating system' added.

Building Standards Division

14 June 2022