STACKRIGHT
SAFETY THROUGH INNOVATION

Joint Code of Practice

Temporary Building Guidance Document

EDITION 10.1

CONTENTS

Introduction

With a re-energised focus running throughout the construction industry in recent years following the Grenfell Tower tragedy, fire safety during the build phase of the works has become a key consideration to ensure the safety of both site personnel and the building/structure under construction. The Joint Code of Practice (JCoP) provides best practice guidance to ensure measures are taken during the build phase of a construction project to reduce the risk of a fire starting on site. In the event of a fire occurring, adherence to this guidance will ensure risk to life and catastrophic damage to the structure is minimised.

A key consideration within this guidance surrounds the materials utilised in the build specification, fire certification and positioning of temporary buildings on construction projects. The purpose of this guidance document is to provide our clients with an overview of the clauses relating to the use of temporary and portable buildings utilised on construction sites as laid out in the latest version (edition 10.1) of the Joint Code of Practice.

JCoP Overview

What Is The Joint Code of Practice?

Written by the Fire Protection Association (FPA), the full name of the Joint Code of Practice is 'The Joint Code of Practice on the Protection from Fire on Construction Sites and Buildings Undergoing Renovation'. The objective of the guidance document is fire prevention on construction sites, which is achieved with a formalised code of conduct applicable to all stages of construction, including the design phase. Compliance with this Code – which applies to construction sites, including those where civil engineering works, alterations, demolition, renovations, fitting out or refurbishment work is being carried out – will greatly minimise the risk of accidental or malicious fires on site.

History of The Joint Code of Practice

The Joint Code of Practice was created in response to concerns raised by insurance companies about the high risk of fires occurring during the construction phase on building sites. At one stage in the 1980's the regularity of fire break out on construction sites had become such an issue that insurers considered not even offering insurance policies to cover them. As a result, the Joint Code of Practice was launched and first published in 1992. It has evolved over the years to ensure it captures the guidance driven by the Health and Safety Executive (HSE), latest test standards and new technology, and it is currently supported by industry recognised Groups and Bodies such as:

- Build UK
- Civil Engineering Contractors Association (CECA)
- Construction Insurance Risk Engineers Group (CIREG)
- Institution of Civil Engineers (ICE)
- National Federation of Builders (NFB)
- Royal Institute of British Architects (RIBA)
- Royal Institution of Chartered Surveyors (RICS)
- Scottish Building Federation (SBF)

HSE Guidance

The FPA collaborate with the HSE to ensure the latest version of the Joint Code of Practice aligns with the HSE's fire guidance document for construction sites, HSG168 – Fire Safety in Construction Work. Many of the clauses are mirrored in both HSG168 and the Joint Code of Practice, one example of this being the newly added stacked cabin clause (13.6) within JCoP 10.1 aligning with clause 6 of Appendix 1 in HSG168.

What Does The Joint Code of Practice Cover?

The Joint Code of Practice applies to construction contracts valued at £2.5m and above, and applies equally to smaller value contracts where these are part of a large construction project.

What Happens if you Fail to Comply?

The Joint Code of Practice is regarded as the benchmark for fire safety guidance for construction projects and as such failure to comply will increase the risk of health & safety issues for all on site and the potential for catastrophic damage to the structure in the construction phase.

Failure to comply with the Joint Code of Practice can also result in your insurance being revoked and a breach of your construction contract. The code itself explains: “If compliance with this Code forms part of the insurance contract, non-compliance with this Code could possibly result in insurance ceasing to be available or being withdrawn, resulting in a possible breach of a construction contract which requires the provision of such insurance.”

JCoP Edition 10.1

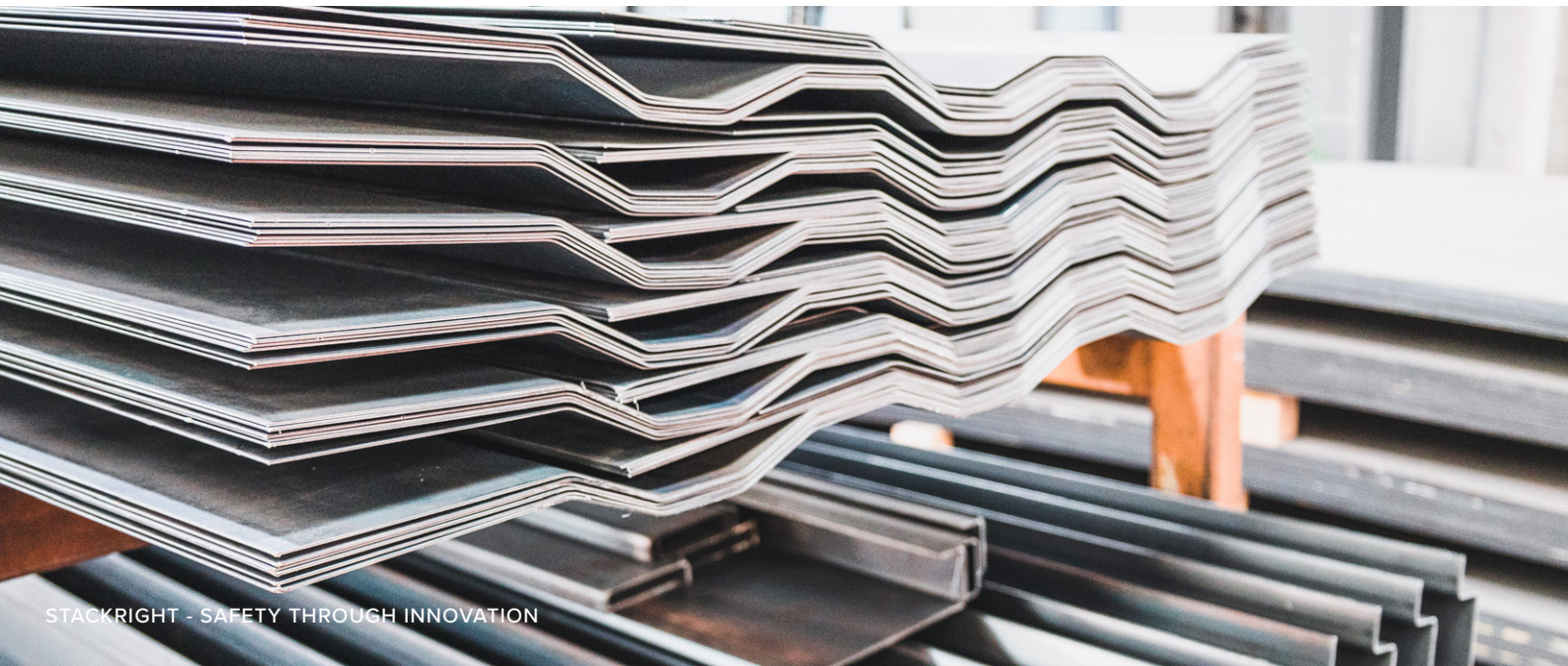
The current version of the Joint Code of Practice (edition 10.1) was published in January 2023 and replaces the now withdrawn edition 10, which was published in August 2022. The current code is applicable to all new construction projects with an insurance requirement for compliance to the Joint Code of Practice edition 10.1.

Responsible Person

As required by the Regulatory Reform (Fire Safety) Order 2005, or equivalent legislation in Scotland and Northern Ireland, during the build phase of a construction contract, responsibility for health and safety passes to the principal contractor. The construction phase of the project must not commence until a construction plan is in place which must include a fire safety plan within it. The principal contractor must then appoint a responsible person to manage each stage of construction – this person is responsible for the construction phase plan and fire risk assessment. Suitable records should clearly identify the responsible person in the construction phase plan and the fire risk assessment, and they must receive appropriate training and be competent in their roles. The responsible person must undertake general fire precautions to ensure the safety of individuals on site. The full list of these precautions can be found in clause 6.1.1 of JCoP edition 10.1.

A key consideration of the responsible person and their fire safety plan is to ensure that temporary/portable buildings utilised on their site are both sited and manufactured to align with the relevant guidance within both the Joint Code of Practice and HSG168 – this can be seen in **the extract below from JCoP 10.1:**

> *13.1 The site fire safety plan must include a suitable and sufficient fire risk assessment for all temporary buildings and temporary accommodation. The assessment should be reviewed periodically.*



JCoP 10.1 Temporary/Portable Building Clauses

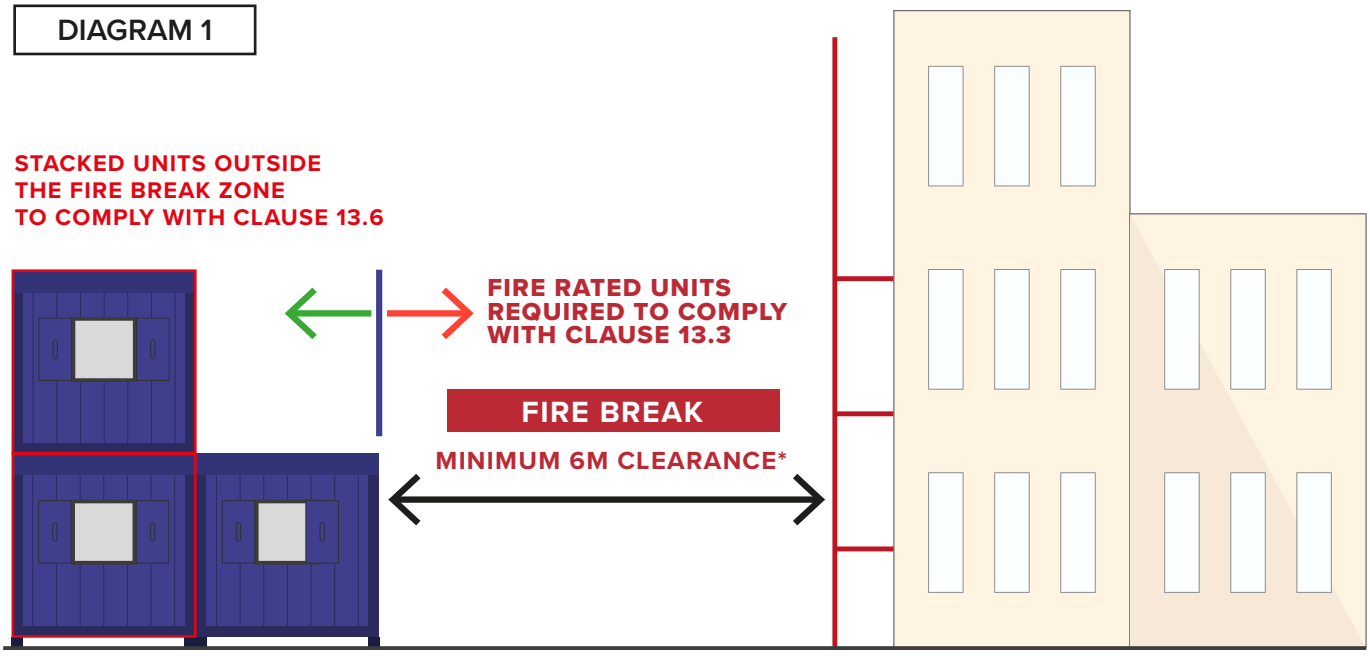
The following section has been designed to provide an overview of the key clauses and guidance within the JCoP edition 10.1 relevant to the type of units Stackright manufacture and supply.

Fire Break Guidance

Clause 13.2 lays out the fire break guidance that must be followed when cabins are deployed on construction projects. In site setups that adhere to the recommended fire break guidance (6m or 20m), no special requirements or fire certification is required for units that are not vertically stacked. Units positioned within the fire break zone should comply with the guidance within clause 13.3 of the JCoP. Vertically stacked units positioned outside of the fire break zone should comply with the guidance within clause 13.6 of the JCoP. **Please see extract from JCoP 10.1 and Diagram 1 below:**

13.2 Temporary building(s) should be separated from the building under construction or refurbishment and other permanent buildings to provide as wide a fire break as reasonably practicable. While it should be aimed to provide a fire break at least 10m wide, it is recognised that this is not always possible, but wherever practicable the fire break should be at least 6m wide. Fire breaks should be kept clear of combustible materials.

DIAGRAM 1



*MINIMUM FIRE BREAK TO 20 METRES FOR HIGH RISK STRUCTURES

How can Stackright help?

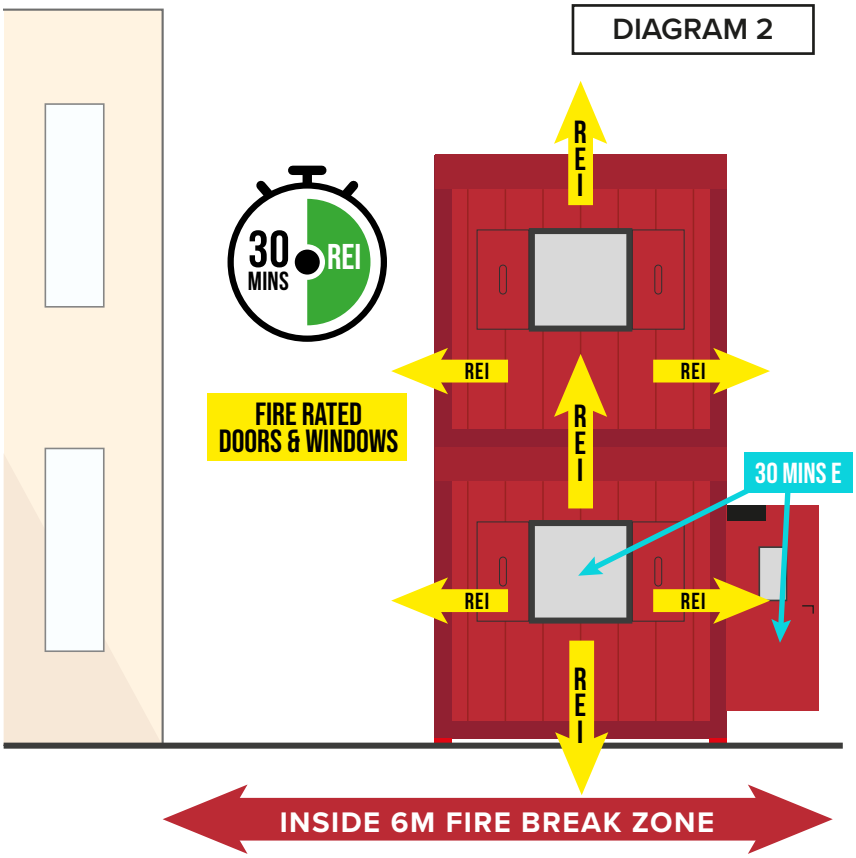
Stackright has tested unit build specifications to meet all requirements in relation to unit positioning on site, detailed above:

13.3 – Fire rated units for use within 6m fire break zone.

13.6 – Full REI testing (roof/floor and supporting members) for stacked units, even when positioned more than 6m from structure.

Units < 6 Metre Fire Break Guidance

In summary, in situations where the minimum fire break guidance cannot be adhered to on a given site setup the temporary building/site accommodation must hold an appropriate level of fire certification and comply with the guidance laid out in clause 13.3 of the Joint Code of Practice (edition 10.1) in full. **Please see extract from JCoP 10.1 and Diagram 2 below:**



13.3 Temporary buildings which meet the criteria described in the 9th Edition of the Joint Code (clause 13.3) and are properly maintained will continue to be acceptable for use. The following revised and updated requirements are provided to assist with future product development and offer a direction of travel. It is anticipated that as of the 1st January 2025 modules meeting these revised requirements will be available to contractors and revisions to this Joint Code implemented at that time. Where it is not reasonably practicable to provide a fire break as described in 13.2 at least 6m wide, temporary buildings must be constructed with materials that do not significantly contribute to the growth of a fire or the propagation of smoke and corrosive or toxic fumes. The temporary building should be designed and constructed so as to meet the following criteria:

(a) Temporary buildings shall not have a storey above 18m above ground, including those elevated above the site or highway;

(b) Compartment floors comprising tops and bases of modules shall achieve 30 Minute (REI) fire resistance to BS EN 13501-2 (ref 23);

(c) Compartment walls to achieve 30 Minute (REI) fire resistance where loadbearing or 30 Minute (EI) fire resistance where non-loadbearing infill to structure that achieves 30 Minute (R) fire resistance to BS EN 13501-2 (ref 23), including around escape stairs;

(d) External walls and roof to achieve 30 Minute (REI) fire resistance where loadbearing or 30 Minute (EI) fire resistance where non-loadbearing infill to structure that achieves 30 Minute (R) fire resistance to BS EN 13501-2 (ref 23), with the roof to be tested from below;

(e) In circumstances where compartmentation is required between modules in the vertical plane, cavities to achieve Class A2-s1, d0 or better in BS EN 13501-1 (ref 12) for reaction to fire and be fire stopped to achieve 30 Minute (E) fire resistance to BS EN 13501-2 (ref 23) to tests in BS EN 1366-4 (ref 24).;

(f) All doors, windows and ventilators to achieve 30 Minute (E) fire resistance to BS EN 13501-2 (ref 23) and be securely closed when the area is unoccupied. Fire resisting doors, windows and ventilators must be fitted with automatic self-closing devices;

(g) External surfaces of walls including any attachments such as walkways to achieve Class B-s3, d2 or better in BS EN 13501-1 (ref 12) for reaction to fire; (profiled or flat steel sheet at least 0.5 mm thick with an organic coating of no more than 0.2mm thickness is also acceptable);

(h) External surface of roof to Class BROOF(t4) to BS EN 13501-5 (ref 25);

(i) Internal floor, wall and ceiling surfaces to Class C-s3, d2 or better in BS EN 13501-1 (ref 12), including within cavities below raised floors to the base of modules, behind linings, or above suspended ceilings to the soffit of modules.

Insulation materials that are part of the external wall or roof construction should be of limited combustibility or better (A2-s1, d0 or Class A1) in BS 13501-1 (ref 12).

Further information with regard to the reaction to fire classification and transposition to national classes is provided in Table B1 in Approved Document B, Volume 2 (ref 26).

How can Stackright help?

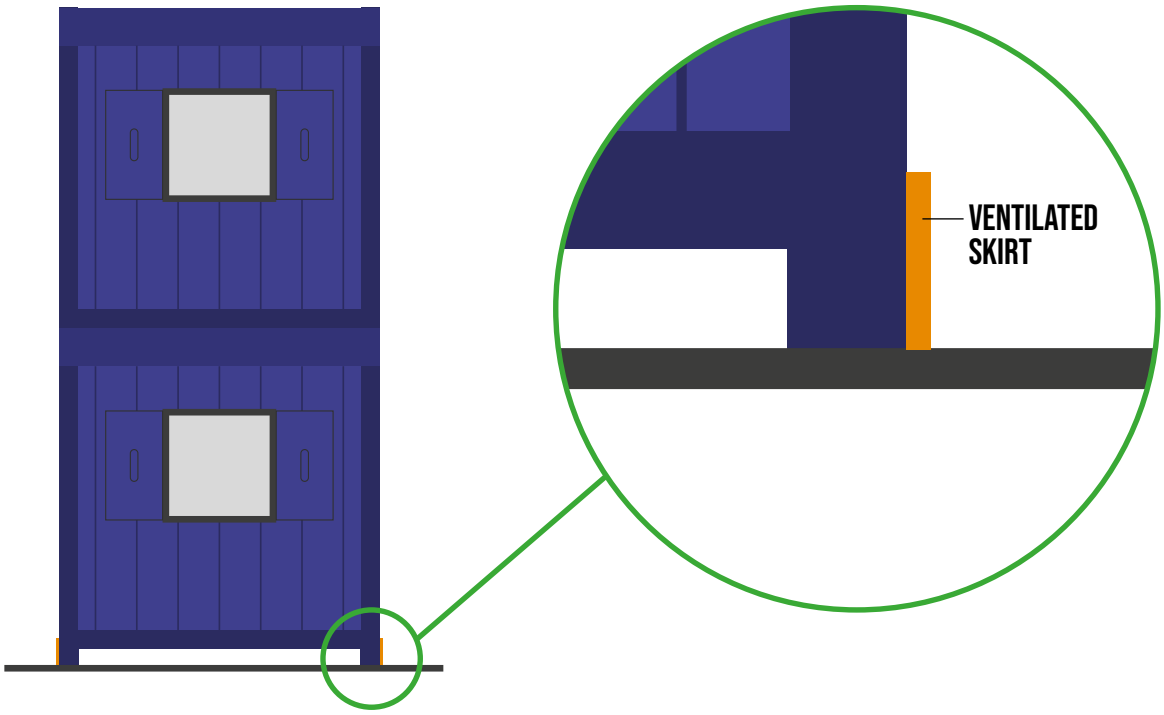
Stackright can supply a full suite of fire rated cabins that have been tested in accordance with BS EN 13501 classification to ensure our units comply with the guidance set out in clause 13.3 of JCoP 10.1. Stackright can also supply walkways and stairs/steps that meet the requirements laid out in clause 13.3(g) of JCoP edition 10.1.

Voids Under Units

Should there be a void between the lower unit floor of the temporary/portable building and exterior ground level, a skirt must be fitted to prevent the build-up of rubbish and debris. The skirt should be designed to enable underfloor ventilation. **Please see extract from JCoP 10.1 and Diagram 3 below:**

13.4 Where the floor of a temporary building is raised above ground level, the space beneath must be enclosed to prevent accumulation of rubbish, whilst still allowing under-floor ventilation. No combustible materials should be stored under any temporary building.

DIAGRAM 3



How can Stackright help?

Stackright can supply horizontal vented skirts, manufactured from non-combustible materials and finished in your preferred RAL colour that can be installed to close this space to rubbish and debris that could increase the potential fire load.

Units > 6m Fire Break

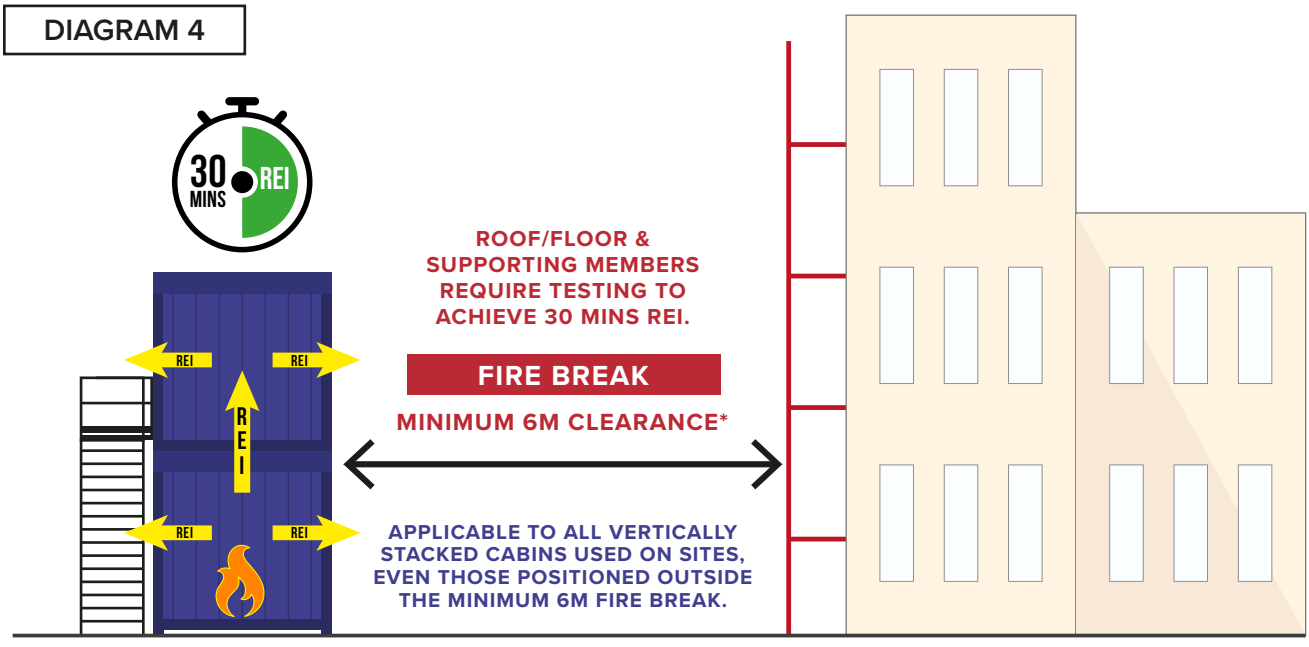
In site setups that adhere to the fire break guidance laid out in clause 13.2 in relation to the recommended fire break (6m or 20m), no special requirements or fire certification is required for units when they are not vertically stacked.

When temporary buildings are vertically stacked (even when located at more than 6m from the building under construction), the roof/floor assembly and supporting members (walls and/or jack legs and/or corner posts) must be tested to BS EN 13501-2 or British equivalent standards to achieve 30 minutes fire resistance for load bearing, integrity and insulation (REI). **(See clause 13.6 from JCoP 10.1 and Diagram 4 below). This clause is mirrored in the HSE's HSG168 guidance document (see extract below from Appendix 1 of HSG168).**

13.6 In circumstances where temporary buildings are stacked vertically the floor/roof assembly and any supporting members to achieve 30 minutes (REI) fire resistance to BS EN 13501-2 (ref 23) or British national equivalent test(s).

HSG168 Appendix 1. 6. All vertically stacked TAUs must have suitable protection to achieve a minimum of 30 minutes' fire resistance (integrity, insulation and load-bearing capacity) of the roof/floor assembly and the supporting members. This is required to prevent fire spread and/or structural collapse within the stack.

DIAGRAM 4



*MINIMUM FIRE BREAK TO 20 METRES FOR HIGH RISK STRUCTURES

How can Stackright help?

As part of Stackright's extensive fire test programme we can manufacture and supply units with build specifications that have successfully undertaken fire assessment and achieved 30 minutes REI for both the roof/floor assembly and supporting members. This ensures our units comply with the guidance set out in clause 13.6 of JCoP 10.1 and within clause 6 of Appendix 1 in HSG168.

REI

Testing Explained

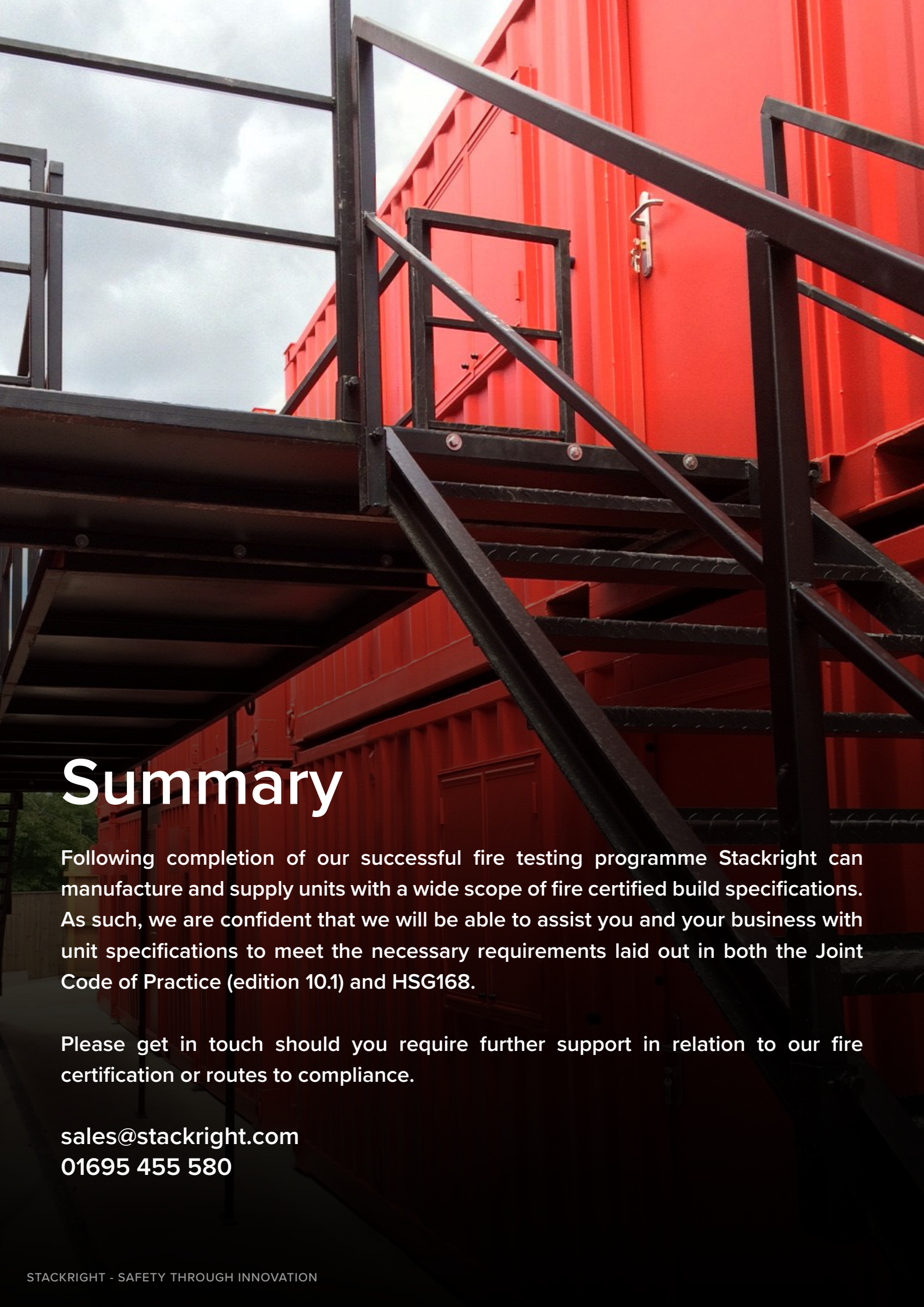
The testing needed to satisfy the requirements within clauses 13.3 and 13.6 of JCoP edition 10.1 sit under the test standard EN 13501-2. The EN 13501-2 standard differentiates the following criteria for describing fire resistance:

Load-bearing capacity (R), integrity (E) and thermal insulation (I). The performance time in minutes of one of the following numbers is given for each criterion: 15, 20, 30, 45, 60, 90, 120, 180, 240. In contrast to other test standards, BS EN 13501-2 also evaluates the load-bearing capacity and is thus deemed to produce a more realistic set of results. The REI marking consists of the following three elements:

R = Load carrying capacity. This is the ability of the element of construction to withstand fire exposure under specified mechanical actions, on one or more faces, for an assessed time without loss of structural stability.

E = Integrity. This is the time in completed minutes for which the test specimen continues to maintain its separating function during the test without ignition of a cotton pad, or passage of a gap gauge, or sustained flaming.

I = Insulation. This is the time in completed minutes for which the test specimen continues to maintain its separating function during the test without developing temperatures on its unexposed surface that increase the average pre-test temperature by more than 140 °C, or increase the pre-test sample temperature at any isolated location by more than 180 °C.



Summary

Following completion of our successful fire testing programme Stackright can manufacture and supply units with a wide scope of fire certified build specifications. As such, we are confident that we will be able to assist you and your business with unit specifications to meet the necessary requirements laid out in both the Joint Code of Practice (edition 10.1) and HSG168.

Please get in touch should you require further support in relation to our fire certification or routes to compliance.

sales@stackright.com
01695 455 580

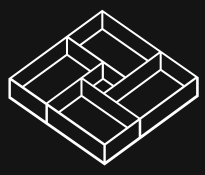
Reference Documents

1. Joint Code of Practice Edition 10, Amendment 1

https://www.thefpa.co.uk/advice-and-guidance/free-documents?q=joint%20code%20of%20practice

2. Health and Safety Executive document Fire Safety in Construction (HSG168)

https://www.hse.gov.uk/pubns/books/hsg168.htm



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