MARCH 2026

# GD 42 Guidance for Installers relating to 'Boundary' Elevations involving Capable Members

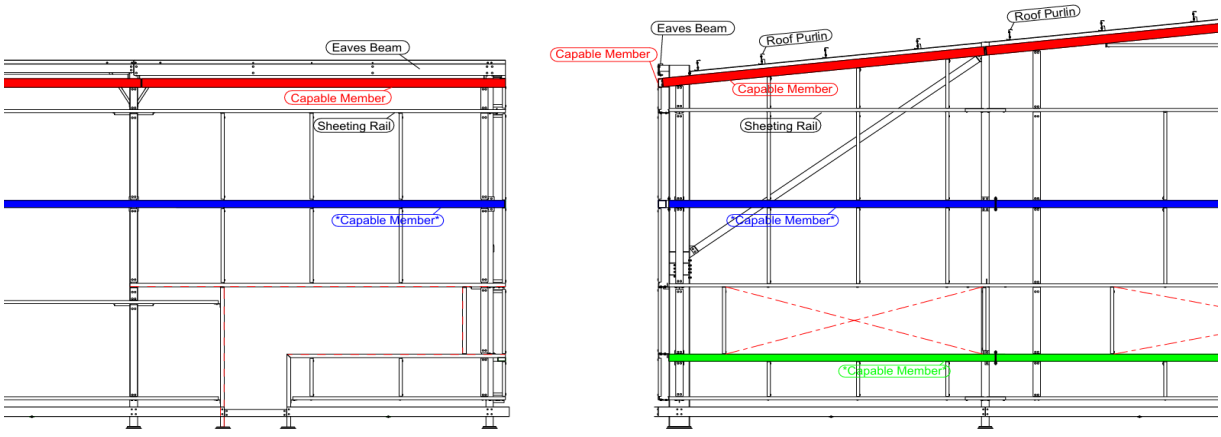
## 1.0 INTRODUCTION

The Metal Cladding and Roofing Manufacturers Association (MCRMA) have produced guidance document GD 42A to provide supplementary information for installers and roofing and cladding contractors. This supplements the information contained within GD 42 Cladding Industry Guidance for 'Boundary' Elevations involving Capable Members. Both GD 42 and GD 42A complement the information contained in the British Constructional Steelwork Association (BCSA) published document 'Technical Specification for 'boundary' Elevations [1] dated 1 July 2025.

The guidance contained within both GD 42A and GD 42 should be read in conjunction with each system manufacturers or profiler's own instructions which must be followed together with their specifications for specific profiles, systems, components, sheet arrangements, junctions and fastener and fixing arrangements.

## 2.0 OVERVIEW

The BCSA technical specification for boundary walls [1] sets out the requirements for an engineered concept, where the fire-resistant external wall cladding is hung from a "capable member" or a series of "capable members" if required.




Elevation Gable End

* Additional capable member requirement based on loading requirements and cladding arrangements

A "capable member" typically refers to a hot-rolled, intumescent coated or otherwise protected structural beam designed to meet the following requirements

- Carry the load from the hung cladding and transfer the load to the main frame.
- Designed to perform at elevated temperatures
- Envisaged to be at the top of a cladding system "drop" or close to the top in the event of a parapet
- Located in boundary side elevations and/or end gables
- Additional, intermediate ''capable members" may be required in tall elevations
- Located at interfaces between different cladding systems, at junctions and positions of protected end laps or at interfaces of vertical/horizontal installations
- It is envisaged that engineering justification is used to demonstrate that the cladding and connections have sufficient strength in the fire condition to remain supported, top hung and in tension

## 3.0 STEELWORK PROCUREMENT

Traditionally, the steelwork has been designed and procured as a separate element to the cladding. It may be supplied as a package or under separate contracts for primary and secondary steelwork

As the basis of the guidance is that cladding should hang from a ''capable member", the use of cleader rails is no longer viable. These should be replaced with properly designed and justified ''capable members" at the locations such as at eaves, gable ends or raking details within boundary walls.

The implementation of a boundary solution requires earlier coordination across all of those involved in the design, manufacture, fabrication, supply and installation of the main frame, secondary frame and cladding for the building. The guidance envisages that this coordination would be by the Principal Designer

Drawings for the proposed steelwork for each of the elevations concerned should be provided by the steelwork designer to allow clear collaboration and confirmation by the cladding manufacturer and cladding contractor. Additional drawings and information for the proposed cladding, protected areas, fixing arrangements and fire resistance requirements for the elevations will also be required.

Early coordination with the cladding manufacturer and cladding subcontractors is critical, as the cladding contractor will need to be aware of such elements to correctly price and install the

system(s) concerned he may also need to have input regarding the preferred length of cladding system elements for site handling purposes.

The table below provides guidance on the interaction and flow of information which is required both upstream from the cladding manufacturer and downstream from the Principal Designer.

## 4.0 TYPICAL JUSTIFICATION CONSIDERATIONS

- The maximum "drop" length of cladding system or composite panel from a single ''capable member" should be justified.
- The cladding system manufacturer and/or the fastener manufacturer or supplier should be consulted about reduction factors for the fasteners at elevated temperatures. Refer to GD42 for further details.
- Liner end laps or joints connecting sheets or panels which are not at the position of a protected member are fully exposed to the fire and therefore have greatly reduced strength. They must be considered in all justifications from the cladding manufacturer.
- Unless specifically designed by the secondary steelwork supplier for the fire limit state it may be assumed that there is no strength in the exposed side rails connections.

## 5.0 TYPICAL ASSUMPTIONS/EXCLUSIONS THAT MAY APPLY

- The ''Capable members" should be specified by the steelwork designer / fabricator.
- Care should be taken as the limiting temperature for the ''capable member" may vary per project and per capable member.
- The system weight as carried by the ''capable member" is based on the cladding system specification and does not consider any additional loads such as signage or lighting, etc.
- Where vertical and horizontal systems interface within the height of the elevation or there is a feature detail required, a ''capable member" may be required, or a more detailed approach may be considered.
- Care and consideration should be given to parapets and gable ends. Always check with the steelwork designer / fabricator that the design can support the cladding from the top of the parapet and/or gable end.

## 6.0 ROLES AND RESPONSIBILITIES

| Roles and Responsibilities | |
|---|---|
| Principal Designer / Architect / Structural Engineer (PD) | Coordination of all aspects of the design, interfacing with all parties involved in the construction and establishing justification for all design aspects. The nominated Principal Designer has overall control of the project. |
| Steelwork Contractor / Fabricator (SC) | Design and justification of steelwork, alignment with specification, design codes and regulations. Downstream interfacing and exchange of information with frame contractors, cladding contractors and component and cladding suppliers. Upstream interfacing with Principal Designer. |
| Principal Contractors (PC) | Upstream and downstream interfacing to ensure that design parameters have been met and justified and all relevant information has been agreed and signed off before progressing. |
| Cladding manufacturer (CM) | Upstream interfacing with other parties to ensure specifications and design parameters have been justified and all relevant information has been passed to those above |

## 7.0 CONSTRUCTION CHECKLIST FOR WALLS INVOLVING CAPABLE MEMBERS

The table below sets out the project stages and allocates responsibility associated with the boundary wall.

Note: Communication across all teams is imperative and all stages must be overseen by the Principal Designer.

| STAGE | Construction Checklist for Walls involving Capable Members | PD | SE | C | CM |
|---|---|---|---|---|---|
| Stage 1 | Confirm the cladding system to be used | | | | |
| | Produce structural calculations and design drawings for boundary wall cladding. | | | | |
| **Stage 2** | Structural calculation for main frame has been produced and circulated | | | | |
| | Boundary wall fire performance parameters have been agreed and circulated | | | | |

| | | | | | |
|---|---|---|---|---|---|
| **Stage 3** | Design drawing and justification for the Capable Member(s) has been produced, circulated and approved by the Principal Designer | | | | |
| | Placement of cladding end laps for protected / unprotected situations are known | | | | |
| | Understanding locations of window / louvres / areas of penetration. | | | | |
| | Inclusion and position of intermediate Capable Member(s) have been agreed and circulated | | | | |
| | Temperature limits at position of each Capable Member(s) have been documented and circulated | | | | |
| **Stage 4** | Design details and installation of the Capable Member(s) have been produced and circulated | | | | |
| **Stage 5** | Specification for fastener for connection to Capable Member(s) have been agreed and circulated | | | | |
| | Justification of fastener performance at elevated temperature including 'reduction factors' have been produced | | | | |
| | Drawings for fastener layout for connection to Capable Member(s) have been agreed and circulated | | | | |
| **Stage 6** | Inclusion of support rails for horizontal cladding and fixing arrangement to Capable Member(s) have been justified, detailed and circulated | | | | |
| **Stage 7** | Remedial process for issues associated with material/products/installation has been drafted (i.e. touch up of intumescent paint). | | | | |
| **Stage 8** | Staged QA checks and escalation process and procedure has been agreed and circulated.<br>This should be a culmination of QA checks at each stage. | | | | |

| | | | | | |
|---|---|---|---|---|---|
| NOTES: | **If the contractor identifies a discrepancy between the steelwork provided and the boundary design requirements, work should pause, and the Principal Designer and cladding manufacturer should be notified.**<br><br>**Any proposed modification or alteration to the agreed design of the boundary wall must be fully justified and reported to the Principal Designer and cladding manufacturer for their agreement before any work commences** | | | | |

## REFERENCES

[1] The British Construction Steelwork Associations Ltd, "Technical Specification for "boundary" elevations," The British Construction Steelwork Associations Ltd, London, 2025.

## DISCLAIMER