

1. INTRODUCTION

The Work at Height Regulations 2005 (WAHR) state that 'Every employer shall, where necessary to prevent injury to any person, take suitable and sufficient steps to prevent, so far as is reasonably practicable, the fall of any material or object', and this document provides guidance on how suitable brickguards can be used to comply with this regulation.

NOTE: the purpose of a brickguard is to prevent materials from falling off the working platforms of scaffolds where toeboards do not offer sufficient protection.

The client and the user is responsible for determining the level of protection required (e.g. via a suitable risk assessment).

The Scaffolding Contractor should advise the client (or user) of best practice, preferably when first discussing the contract.

2. TEST AND DESIGN

Brickguards should be robust enough to prevent material falling from the scaffold, and the informed site-specific risk assessment will identify these loads. Section 2.1.8.6 of TG20:13 Design Guide specifies load requirement.

The selected brickguard should be capable of withstanding the likely loads that may be imposed on it. In most cases, the decision should not be difficult to make and will not need complex calculations.

Section 2.1.8.6 of TG20:13 Design Guide gives technical guidance on the design and loading of brickguards and clarification should be sought from the manufacturers or suppliers that they comply with these requirements.

3. RISK ASSESSMENT

The Risk Assessment carried out by the client or user should determine the level of protection required, as well as the type, method of fixing, load bearing requirements and positioning of brickguards.

NOTE: The NASC recommend that the scaffold contractor should advise the client or user (and interested parties) of best practice, including the inclusion or omission of brickguards, as early in the contract as possible.

The level of protection will be greatly influenced by the number of people at risk, the nature of the work, the proximity of passers-by, and the results of the risk assessment and the type of material that could fall from the scaffold. For instance, solid mesh may be appropriate for concrete blocks but netting could be used instead to deal with less substantial items such as stone chips. Ultimately it is the client or users decision.

Briefly:

- Brickguards (or an equivalent alternative) are needed where there are risks of material falling, which can lead to injury;
- Brickguards are required where the Client has a clear policy or has a specific request to have these installed and these should be fitted where it is reasonably practicable;
- Brickguards are recommended for the sides of Loading Bays etc, where materials are placed via crane or fork lift truck.

In public areas and on scaffolds erected for long durations solid protection (boards/plywood) should be considered.

NOTE: some proprietary panels can also be used to meet additional edge protection requirements provided they comply with WAHR Schedule 2 (which details the requirements for Guardrails, Toeboards, Barriers and similar Collective means of Protection). A positively secured and robust mesh guard can perform this function in some circumstances.

However, the NASC recommend that intermediate guardrails are always fitted when brickguards are being used.

NOTE: The Scaffolding Contractor should also ensure that they carry out a suitable & sufficient risk assessment to decide on appropriate measures to prevent material falling during the erection, alteration and dismantling of the scaffold (which may include installing suitable brickguards or installing more than one toeboards high on gantries where scaffold materials are stacked during the erection and dismantle phases). It is important to ensure that the area below the scaffold is kept clear during erection.

4. SUITABILITY, STACKING AND STORAGE

With brickguards, there is a range of different types of mesh size available to suit all situations. Specific advice cannot be given as to the type of brickguard required (as this should be subject to a specific on-site risk assessment), but the following gives good general advice.

There are generally three types of brickguard on the market (made of various materials, including metal and plastic):

- Brickguards with fixed handles (designed to hook over the top guardrail);
- Brickguards with detachable handles.
- Brickguards with no handles (which are designed to be secured to the top guardrail with suitable tying methods).

The client or user will determine the type of brickguard best suited for the task (and whether that brickguard is made of metal or polypropylene etc), but the following details the pros and cons of the three main types:

Detachable brickguard handles can aid storage as the panels can be stacked flat on top of each other without causing damage, but time can be lost fixing and unfixing handles. Fixed handles speed up the process of installation, but time can be lost stacking the brickguards in a suitable way to avoid damage to the handles. Flat panel brickguards with no handles can allow good storage, but time can be lost securing these in place to the top guardrail, and care must be taken in removing the temporary fasteners during the dismantle phase.

Where brickguards are stored, care should be shown to ensure that they stacked neatly and safely and not subject to wind dislodgement.

Typical Brickguards (illustrations from TG20):



Figure 1
Typical galvanised steel brickguard

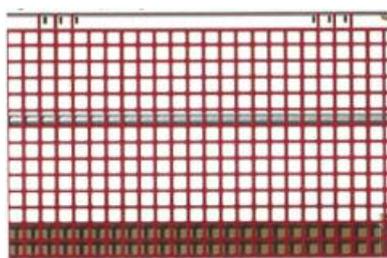


Figure 2
Typical polypropylene brickguard



Figure 3
Typical proprietary brickguard with
intergrated toeboard

5. INSTALLATION, INSPECTION AND REMOVAL

To ensure that brickguards prevent material falling they need to have suitable and sufficient structural strength and be positioned, used and installed in a manner that sustains that goal.

Brickguards must be fixed as per the manufacturer's guidelines, inspected as part of the weekly scaffold inspection regime (e.g. before use and every 7 days), and must be capable of being removed in a safe manner.

NOTE: Brickguards are often moved without authorisation by other trades, and damaged. Where this occurs, these should be replaced and recorded on the 7-day inspection.

Where brickguards are to be used, they may need to be secured or fixed in position, e.g. if subjected to foreseeable loads including inclement weather which may dislodge them.).

The manufacturer will specify whether the brickguard requires lapping.

6. REFERENCES

The Work at Height Regulations 2005 (WAHR);
BS EN12811-1;
NASC Technical Guidance: TG20 [latest revision].

Whilst every effort has been made to provide reliable and accurate information, we would welcome any corrections to information provided by the Writer which may not be entirely accurate, therefore and for this reason, the NASC or indeed the Writer, cannot accept responsibility for any misinformation posted.

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