

ULTRA ACCESS

Scaffolding Exclusion Zones

And how they are not only legally required, but also safety critical

Scaffolding Exclusion Zones (also called drop zones or exclusion areas) are clearly defined areas beneath or around scaffolding where falling objects could cause injury.

No unauthorised person is allowed to enter these zones while work at height is taking place. In scaffolding, exclusion zones are one of the most important risk control measures because the majority of serious and fatal injuries on construction sites are caused by falling objects or people falling from height.

The nature of scaffolding work makes falling objects almost inevitable - regardless of the controls implemented during the risk assessment stage - so, as a way to remove the risk completely, **Exclusion Zones** are built around the area, below where the scaffolding works are taking place.



Under the **Work at Height Regulations 2005**, requires measures to prevent materials or objects falling and, where this is not possible, to prevent people being struck.

Exclusion zones, of course and other components build into the scaffold structures themselves, like; toe-boards, brick guards, netting, fans, etc are all recognised control measures.

There are other regulations, laws, etc that also (maybe ambiguously) state that **Exclusion Zones** are to be installed as an overarching effort to meet safety and "Duty of Care" obligations, such as the Construction (Design and Management) Regulations 2015 (CDM) and the Health and Safety at Work etc Act 1974.

NASC's SG4 (Safety Guidance) also includes the use of **Exclusion Zones**, as a control measure to reduce the risks of materials, tools, etc falling from height onto unsuspecting people below.

How to calculate how large a perimeter an **Exclusion Zone** has to be...?

Using the formula:

Exclusion Zone = Height + 3m or $EZ=H+3m$ one can quickly calculate the approximate size of the exclusion area they might need if there is a risk of objects falling from height.

However, if you include, "**Maximum Lateral Deflection**" theory which combines gravitational forces and windage, a more accurate formula would be something like this:

$$\text{Exclusion Zone} = \text{Height} (\times 1.1) + 3m$$

So, for say... a 20m high scaffold one could quickly calculate it as:

$20m (\times 1.1) = 22m + 3m = 25m$ Exclusion Zone, however this does not account for deflective objects, so as with all ULTRA ACCESS publications, being **ADVISORY ONLY**, its always best to seek additional professional advice from either **NASC**, or a good Scaffold Design Engineer.

Exclusion Zones can be a whole number of things, from cones, to safety / hazard tape, to physical barriers, to even A-Frame Handrails... with the more robust, with signage always being preferred, in the eyes of health and safety law.

Objects falling from height often lead to fatalities, so efforts to protect those below are not only legally, but also morally required... **ultimately, its ALWAYS better to be safe, than sorry.**