

HOUSEBUILD INFONET - ISSUE 02.06

FREE information for developers and builders constructing new homes

This issue focuses on internal falls during installation of joists, floors and roof trusses and through stairwells and other openings. We examine the hazard and precautions commonly used by housebuilders. If you are aware of other types of cost effective control then please let us know.

INTERNAL FALLS FROM HEIGHT

External falls from buildings, ladders or working platforms have been the focus of attention for many years. However, other serious injuries result from internal falls into buildings. The hazards are:

- **roof trusses** - falls into building from perimeter scaffold or from the trusses themselves;
- **joists** - falls at the leading edge or between joists;
- **floors** - falls from floor edges or between joists;
- **stairwells** - falls into stairwells and other openings.

A range of precautions is now available and homebuilders are using both working platforms and fall arrest systems to prevent falls or minimise injury.

PRECAUTIONS

Photographs 1-10 on the attached pages illustrate some known precautions, which include:

- **working platforms** - proprietary structures creating a temporary safe working platform;
- **soft landing systems** - air bags or bags filled with impact absorbing materials;
- **safety nets** - used mainly to provide protection during roof truss erection;
- **stairwell protection** - openings are boarded out or provided with edge protection.

LACK OF ATTENTION TO DETAIL

Photographs 11-14 illustrate some typical problems. Incidents still occur where suitable precautions have not been taken or where there is a failure to ensure that they are implemented fully. Whatever precautions are used, they must to be properly managed, supervised and maintained as work progresses.

TEMPORARY INSTABILITY

Injuries also occur when joists collapse during installation. It is vital that, where joists are used as a place of work during construction, the structure is capable of bearing loads imposed as a result of that work. Joist have collapsed solely under the weight of workmen but also when loaded out with building blocks etc.

WEBSITES OF SOME KNOWN SUPPLIERS

Some known suppliers of safety systems relevant to this work are attached.

Thank you.

Philip Poynter
HM Principal Inspector
HSE Construction Division London, East and South East Unit

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Platforms



1



2



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Soft landing systems



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5

Safety nets



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Stairwell and other openings



8



9



10

Lack of attention to detail



11

Fresh Air fall arrest!

The area where a fall may occur is not fully protected



12

Wooden fall arrest!

The area where a fall may occur contains stored or fallen materials



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14

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FALLS FROM JOISTS, FLOORS AND ROOF TRUSSES WEBSITES OF SOME KNOWN SUPPLIERS OF SAFETY SYSTEMS

(HSE does not endorse or recommend any particular product or service. There will be other providers on the market. Users need to be satisfied that any combination of solutions chosen is effective for their own particular circumstances.)

Platforms	
Safety Systems	http://www.reynolds-safety-systems.com/
SafetyDeck	http://www.safetydeck.net/
Oxford Safety Components	http://www.preventisme.org/p/19FCE0EC9146174CC1256BFE0036AA52
Soft landing system	
Airtek Safety Ltd	http://www.airteksafety.com/safetysystem.htm
Forest Safety Products	http://www.softlandingsystem.co.uk/index.html
Marwood Group Ltd	http://www.marwoodgroup.co.uk/product.php?PID=10
SGB	http://www.sgb.co.uk/NetBuildPro/process/61/SoftLandingBags.html
Stairwell etc openings	
Safety Platforms Ltd	http://www.safetyplatforms.co.uk/stair_safe.htm
Oxford Safety Components	http://www.preventisme.org/p/19FCE0EC9146174CC1256BFE0036AA52
Euro Towers Ltd	http://www.eurotowers.net/KSAU.htm
Airtek Safety Ltd	http://www.airteksafety.com/stairsafe.htm
Safety nets	
Airtek Safety Ltd	http://www.airteksafety.com/safetynets.htm
Safety Net Services	http://www.safetynets.co.uk/
Ultimate access	http://www.ultimate-access.co.uk/
SGB	http://www.sgb.co.uk/NetBuildPro/process/78/ProtectionNetting.html
The Safety Netting Co	http://www.safetynettingcompany.co.uk/