Technical Guidance

Pitched roofs to garages – holding down straps

Question
Are holding down straps required to pitched roofs on detached garages?

Considerations
- NHBC Standards 7.2-D3(c) requires holding down straps to all roofs in Scotland, Northern Ireland and other areas of severe exposure.
- BS 8103 ‘Structural design of low rise buildings’ refers to the use of holding down straps where dead loads do not exceed wind uplift forces.
- Building regulations refer to holding down straps being needed dependent on pitch, type of roof covering and local experience of wind gusts.

Answer
Holding down straps should be provided:
- To all roofs in Scotland, Northern Ireland and other areas of severe exposure.
- Where the roof pitch is below 15° or the roof has a lightweight covering with a laid mass of less than 50 kg/m².
- Where local experience suggests there is a risk from wind gusts.