

AS 2050 (2018) INSTALLATION OF ROOF TILES

UPDATE

Under the National Construction Code (NCC), roofing tiles must be installed in accordance with **AS 2050: Installation of Roof tiles**. During the past few years, AS 2050 (2002) has been revised with the 2018 version recently being released.

This factsheet aims to summarise the key changes that have taken place in the 2018 revision and its implication to the industry.

KEY IMPLICATIONS FOR BUILDERS

- Clear information for choosing correct steel batten and corrosion protection measures;
- An engineer's guidance is needed for roof tile installations higher than 15m;
- The 2018 standard comprehensively outlines acceptable fasteners for fixing battens to softwood, hardwood and steel trusses/rafters; and
- Fasteners manufactured in accordance to AS 1684 are considered capable of withstanding wind-loads with no further advice required from engineers.

KEY IMPLICATIONS FOR MANUFACTURERS

- Tiles can be used in all wind conditions for commercial and residential developments, resulting in more market opportunity for manufacturers;
- Less ambiguity around correct tiling is likely to result in reduced failures, and hence, the debates around warranty issues for manufacturers can be reduced;
- Clear specification by qualified engineer is required for tile installations over 15m; and
- Requirement on manufacturers' specification has been changed to NOTE only.

KEY IMPLICATIONS FOR ROOF TILERS

- Additional information is now included to remove the referencing of external standards, in turn, making it more user friendly for roof tilers;
- Maximum batten spans are determined by batten size, regardless of wind conditions;
- Fasteners manufactured in accordance to AS 1684 are considered capable of withstanding wind-loads. Roof tilers no longer need to understand highly technical content or refer to other wind design standards;
- Roofing tilers have information about which metals can be used in contact with other metals to avoid reaction/corrosion;
- Contents that are directly related to roof tiles are all included, instead of referring to external documents. This means that additional standards don't need to be purchased; and
- References to external documents are only for additional features (flashing, sarking, gutter, etc.).

***AS 4200.2 Pliable building membranes and underlays: Installation** was updated in 2017. Related requirement changes may need to be noted while installing the roof tiles.

OVERVIEW OF KEY CHANGES

In short, AS 2050 (2018) is a much easier read than AS 2050 (2002), including all the relevant information needed to install roof tiles correctly.

		AS 2050 (2002)	AS 2050 (2018)	RELATED ITEM
APPLICATION RANGE	BUILDING TYPES	Unclear information is provided on the building types of which the standard applies to.	Roof tiles are applicable for both residential and commercial buildings.	New Clause 1.2
	WIND CLASS	Tiles were only able to be used under N1 – N4 (non-cyclonic), or C1 - C3 (cyclonic) wind classifications.	The categories have been extended to C4 for cyclonic and N6 for non-cyclonic conditions.	New Clause 1.2; Clause 1.4.7; Table 2.2.1 (A) and (B); Table 2.4.2 (A), (B) and (C)
STEEL BATTENS/ RAFTERS		For requirements of steel battens the user was referred to an external document (NASH Standard).	Additional information is now included for the requirements of steel battens. Detailing for metal battens and rafters is also included.	Clause 3.2.1; Table 2.2.1 (A) and (B)
FASTENERS		Fasteners were required to meet several requirements to be considered suitable for satisfying wind loads, with reference to multiple external standards.	Fasteners manufacturer to AS 1684 are considered to withstand the wind loads.	Clause 2.4.2 (C)
SOLDIER COURSES		No provisions were included for soldier courses or their fastening methods.	Stringencies regarding the installation of soldier courses introduced. Requirements for fastening and clarification of hip tiles and ridging were added to accommodate for soldier courses.	Clause 3.3, including new Clause 3.3.4
METAL COMPATIBILITY		The compatibility of having different types of metals in contact without reacting was unclear.	Detailed and easy to comprehend information has been included, outlining the types of metals that can and cannot be in contact to avoid adverse reactions and corrosion.	New Table 2.4.3
HEIGHT RESTRICTION		The standard was applied to roofs with a pitch of 15° or greater.	The standard applies only to roofs with a pitch of 15° or greater, where the height of the eaves is less than 15m.	Clause 1.1
OTHER EDITORIAL CHANGES		The standard contained unclear information raising ambiguity around some clauses, numerous references to external documents and unnecessary technical content.	Small editorial changes were made for clarification. Some technical content was removed as it was no longer relevant.	Clause 3.1.4; Table 2.4.2 (C) NOTE 2; etc.