GUIDELINE
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SDI and SFI

SDI (smoke developed index) and SFI (spread of flame index) are two early fire hazard performance measures given in AS 1530.3:1999 Methods for Fire Tests on Building Materials, Components and Structures Part 3, Simultaneous Determination of Ignitability, Flame Propagation, Heat Release, and Smoke Release to determine the surface fire performance of building materials such a sheet linings and their applied finishes.

Specific performance data must be obtained from the product manufacturers for the substrate material and the finish applied. BRANZ does not maintain a record of manufacturers' test results nor disclose BRANZ test data to third parties.

What goes here?

In a recent case, the designer specified a particular brand of insulation to be installed. However, the builder installed another brand that had the same R-value. Because the R-value was the same, the building inspector accepted the change without checking that the change had been instructed by the designer or owner. However, the architect asked (correctly) for the installed insulation to be removed and the material specified to be installed. While the change may have met the requirements of the Code as far as the building inspector was concerned, the builder was in breach of contract because the change had not been authorised by either the architect or the client.

NZS 4218:2009

The 2009 revision of NZS 4218 Thermal insulation – Housing and small buildings has been released. A link to Standards New Zealand to allow the purchase of the standard is available through the BRANZ website. Until formally cited by the Department of Building and Housing, the current version, NZS 4218:2004, remains the version called up in the Acceptable Solution. Use of the new version is encouraged, as is the latest version of any compliance document. NZS 4218:2009 can be used as an Alternative Solution and using it should make the compliance process for H1 easier. All the requirements are in one document, some unnecessary hurdles have been removed and more guidance and examples are provided. Some common situations that were not specifically covered in the previous standard (e.g. mixed construction, alterations) now have specific methods outlined.

Appraisal validity

The BRANZ website (and each issue of Build magazine) has a complete listing of valid Appraisals. If not listed on the website (Build is only published every two months, so the website will always be the most current reference), the product is not appraised. Build also publishes recently added and withdrawn Appraisals.

An Appraisal may be withdrawn for a number of reasons. Typically these are:

- the manufacturer no longer wishes to maintain the Appraisal validity
- the product may be withdrawn from the market
- the product has been modified from the product that was appraised.

Occasionally, BRANZ may withdraw an Appraisal for technical or contractual reasons.

ALF 3.2

ALF 3.2 (Annual Loss Factor) tool to allow designers to determine the building performance index (BPI) is a free online aid to the thermal design of houses that is now available for use by designers. It is presented in a step-by-step format providing a simple method of calculating the energy performance of conventional New Zealand houses. See www.branz.co.nz/alf.

ALF 3.1

The ALF 3.1 calculation tool (for determining the BPI) is also still available for designers to use. However, only the BPI calculation given by this tool can be used for consent purposes – remember the conversion factor given in the H1 support page on the BRANZ website must be applied to the BPI given in ALF 3.1. The calculation method and schedule method results given in ALF 3.1 are not valid compliance options despite showing a positive result.

ALF climate files

When using ALF 3.1, the Auckland central climate file only applies to buildings within the immediate CBD area – for all other areas, use the greater Auckland climate file when carrying out calculations. This anomaly has been corrected in ALF 3.2.

Downlights again

The installation of open downlights within ceilings has three key outcomes:

- It compromises the thermal performance of an insulated ceiling.
- In damp areas (bathrooms, laundries and kitchens), it allows the migration of moisture through the downlight into the spaces above.
- There is a fire risk where insulation covers or is too close to the downlight.

NZCEP 54 does not permit the use of open downlights where the ceiling is insulated. It requires the use of CA-rated downlights. Designers need to check that the downlight specified is CA-rated, as downlights that simply have a cap fitted over them may not be CA-rated. Section 3 of NZS 4218:2009 gives to the requirements to ensure the integrity of the thermal insulation is maintained.

BRANZ Seminars 09

BRANZ research has identified wet areas within buildings, such as bathrooms, as a potential problem if the spaces are not detailed and constructed to contain the water and/or the materials selected are not durable in a damp environment. Excessive levels of moisture, mould and coldness were also identified as significant problems. Our next seminar will visit 22 centres nationwide (beginning in Invercargill on 3 August) and looks at the design and construction principles for these areas. This is a must for designers – including specialist kitchen and bathroom designers – builders, building officials, tilers, waterproofing applicators and plumbers.

Date	Location	Date	Location
Mon 3 Aug	Invercargill	Wed 26 Aug	Rotorua
Tue 4 Aug	Queenstown	Thu 27 Aug	Gisborne
Wed 5 Aug	Dunedin	Fri 28 Aug	Napier
Thu 6 Aug	Timaru	Mon 31 Aug	Palmerston North
Fri 7 Aug	Christchurch	Tue 1 Sep	Kapiti Coast
Mon 10 Aug	Whangarei	Wed 2 Sep	Wellington
Tue 11 Aug	Manukau	Thu 3 Sep	Masterton
Wed 12 Aug	Albany	Fri 4 Sep	UH (Trentham)
Thu 13 Aug	Ellerslie	Mon 7 Sep	Greymouth
Fri 14 Aug	New Plymouth	Tue 8 Sep	Nelson
Mon 24 Aug	Hamilton		
Tue 25 Aug	Tauranga		

See www.branz.co.nz (click on Wet Areas seminar) for more details and to register online.

CITE set to return

BRANZ and the Open Polytechnic have signed an agreement that will see newly redesigned CITE courses that are more easily accessible than ever before. Keep an eye out for more information as we expect the first courses will be available later this year.