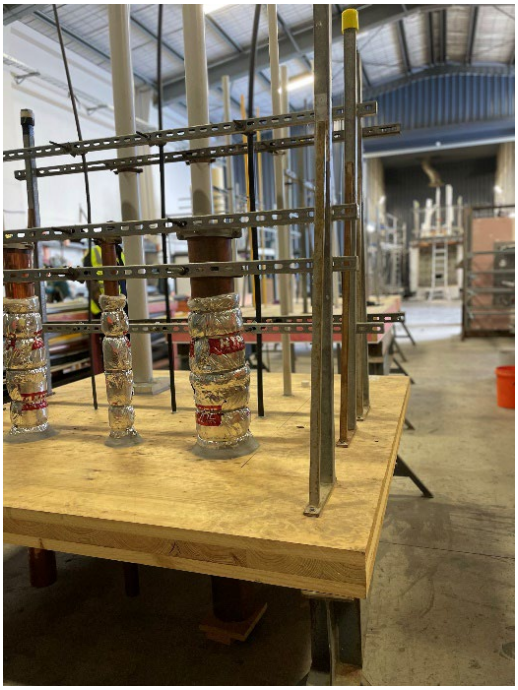
Lab area tour photos:



CANTERBURY/WESTLAND BRANCH TRAINING AND NETWORKING EVENT 31 January 2025

Attended

1. Tony Davison	
2. Peter Van Der Zee	
3. Barb Dillon	
4. Paul Clark	
5. Henry Stikkleman	
6. Mark Milnes	
7. Bryan McKay	
8. Sven Rigarsford	
9. Madeline Blacktop	
10. Ana Garrido Morales	
11. Carl Sherwood	
12. Brooke Parker	
13. Kerry Walsh	
14. Mike Rowe	
15. Chris Beckham	
16. Adrienne Slattery	
17. Nathan Evans	
18. Zoei Craigie	
19. Ghislaine Warren	
20. Liz Ashwin	
21. Delwyn Philips	
22. Tania McGrath	
23. John Thornton	
24.	
25.	

Apology

1. John Blanken
2. Mathew Constable
3. Jenny Lilley
4. Adele Patchett
5. Nigel Smith
6. Jim Nguyen
7. Adam Modica
8. Jon King

Waitlist

Southbrook
FIRE RESEARCH LTD

BOINZ Meeting

Friday, January 31, 2025

Key Points

- SFR company profile
- ISO 17025
- AS 1530.4
- Passive Fire Protection Principles

Executive Summary

"There's a way to do it better – find it." Edison

Testing is the only way to put theory into practice. Although the methods used may not be perfect, they set a benchmark to which all products must conform, to establish safety across the board.

Southbrook Fire Research

Established in 2020 to push the testing industry in speed, visibility and streamlined process.

SFR routinely performs 2 tests per week. Issuing reports within 14 days of test completion.

State of the art LIMS system allows for clients to detail exactly what is required for their systems, while having full access to progress of the project

The Team

Kyle Koke
Lab Manager

Mathew Hooper
Techincal Manager

Mitch Burgess
Lead builder

Jon Sehnert
Builder

Testing Industry ISO 17025

Impartiality

Lab must operate in an impartial manner.

Confidentiality

All results are proprietary information of the client.

Quality Process/Management System

Continual improvement processes where non-conformities and improvements are actioned

Resource Management

All equipment is verified for purpose and is properly maintained/calibrated per standard specifications

Testing Method – AS 1530.4

Beginnings

Starting as AS A30–1935
Revised to AS 1530.4 in 1975
with current edition being
2014.
Modelled from ISO 834

Area of use

Australia and New Zealand

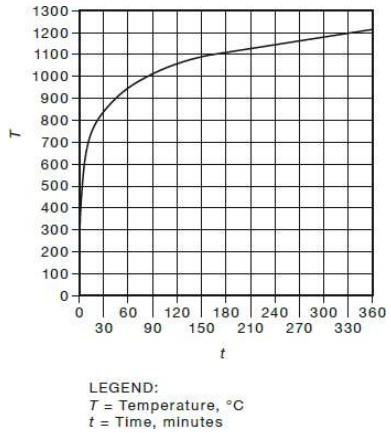
Products covered

- Walls
- Floors
- Beams/Columns
- Windows/Doors
- Ducts
- Services
- Dampers

AS 1530.4

Time Temperature curve

$$T = 345 \log_{10}(8t_{min} + 1) + T_0$$



LEGEND:
T = Temperature, °C
t = Time, minutes

Pressure

For a wall: Specimens must be in an area from 10Pa to 20Pa
For a Floor: All specimens are subject to 20Pa

Ratings

Structural

Assemblies (Walls or Floors) and components (Beams, columns) are subject to loading, or meet critial temperatures

Integrity

Flame >10sec , or igition of a cotton pad pass/fail criteria. Gap guage failure

Insulation

Temperature rise of 180C from the start of the test pass/fail crietera. Or average rise of 140C (assemblies)

Reporting

Ratings achieved

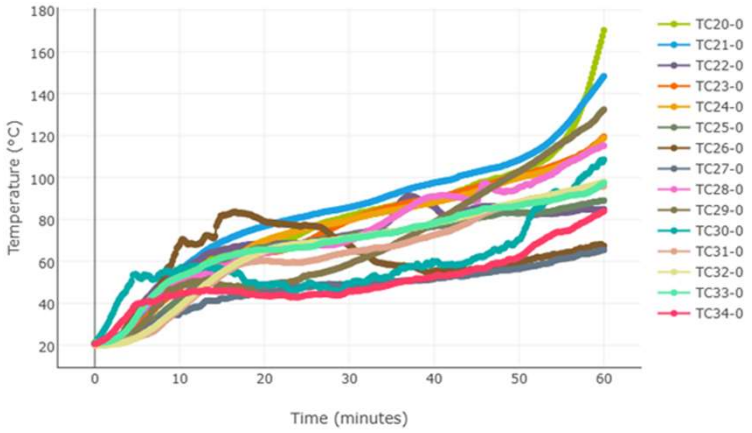
60/60/60 or --/60/60 for services for example.
Thermocouple data, pressure data

Variations

Less onerous/more onerous conditions that are outside the parameters of the standard

Test observations

Visual description of events during the test



Products evaluated and construction method

Specific details on the products being evaluated and the methods/products used for installation

Passive Fire

Passive fire protection is a system of components or barriers that limit the spread of fire and smoke within a building without becoming active or requiring movement. Passive fire protection can include fire doors, fire-resistant walls, floors, ceilings, ducts, and dampers.

Typical Materials

Inert Sealants

Fire rated mastic or similar to adhere to substrates or services to prevent heat/flame transfer.

Intumescent Sealants

Activating under high heat (typically +200C) To fill voids left by combustible services or substrate.

Board Systems

Typically mineral wool/ceramic wool boards able to withstand high heat while staying in place.

Fire Collars

Metal collars filled with an intumescent strip. Can go around pipes, cabling and other services

Multi Stop boxes

Metal cases filled with intumescent. Can house multi services

Fire Barriers

Single/multi layered materials that can create a barrier by being fixed in place

Passive Fire Systems

Ensure that those systems installed match the tested system. Key variations may include specimen size, annular gaps, products used (no cross branding) and matching substrates tested on – for example a 2hr concrete system being used on a 2hr plasterboard wall.

Questions?

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Thank You