
VELUX®
INFERNO
Exova
Warringtonfire

It was a **COOL DAY** in Melbourne...

A VELUX SKYLIGHT FACES EXOVA'S RED HOT NEW $1.6M FIRE RESISTANCE FURNACE. THE FURNACE IS THE FIRST OF ITS KIND IN AUSTRALIA.

...until we turned on the

HEAT

It was the coldest day of the year in Melbourne when close to 100 building surveyors and certifiers were gathered for the inaugural Exova Certifiers Education Day. But Exova Warringtonfire had turned on the heat inside...

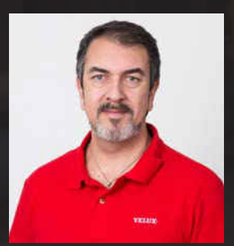
1100º CELCIUS

A VELUX skylight faced Exova's new furnace with a surface temperature of 1100°C in a bushfire test. "As world leaders in skylights we use Australia's leading facility for our Australian testing," said product manager Ingram Davids, VELUX. "Exova has been our testing partner for more than a decade and we're here today because we'd like to support their efforts to educate building surveyors and certifiers in fire safety."

EDUCATION SAVES LIVES

"It's all about education," said managing director Peter Downer, Exova. "Better education means better compliance – better compliance saves lives. Many building surveyors and certifiers have never witnessed a fire test, even though they are ultimately responsible for fire safety. We would like to change this and the Exova Certifiers Education Day is a step in that direction."

PETER DOWNER
MANAGING DIRECTOR, EXOVA



INGRAM DAVIDS
PRODUCT MANAGER, VELUX

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A VELUX skylight came under

ATTACK

Bushfire Attack

LEVEL 40

The Bushfire Attack Level 40 is the second highest level within the scope of the Building Code of Australia. The test is designed to emulate extreme radiant heat flux – up to 40kW/m^2 – and potential flame contact. Open the flaps to see what happened when a VELUX skylight was put through the extreme BAL 40 test...

1 Test preparations

A burning crib is placed on the glass to simulate burning debris in a real bushfire. The crib is blowtorched for 3 minutes before being dropped onto the glass. Meanwhile the furnace is heating up – like a giant toaster getting ready to reduce the skylight to ashes.

2 Start

When the crib is in place and the furnace has reached the required temperature, the shield is removed. The radiant heat is almost unimaginable. The surface temperature of the furnace is upwards of 1100ºC...as hot as the lava flowing from an erupting volcano!

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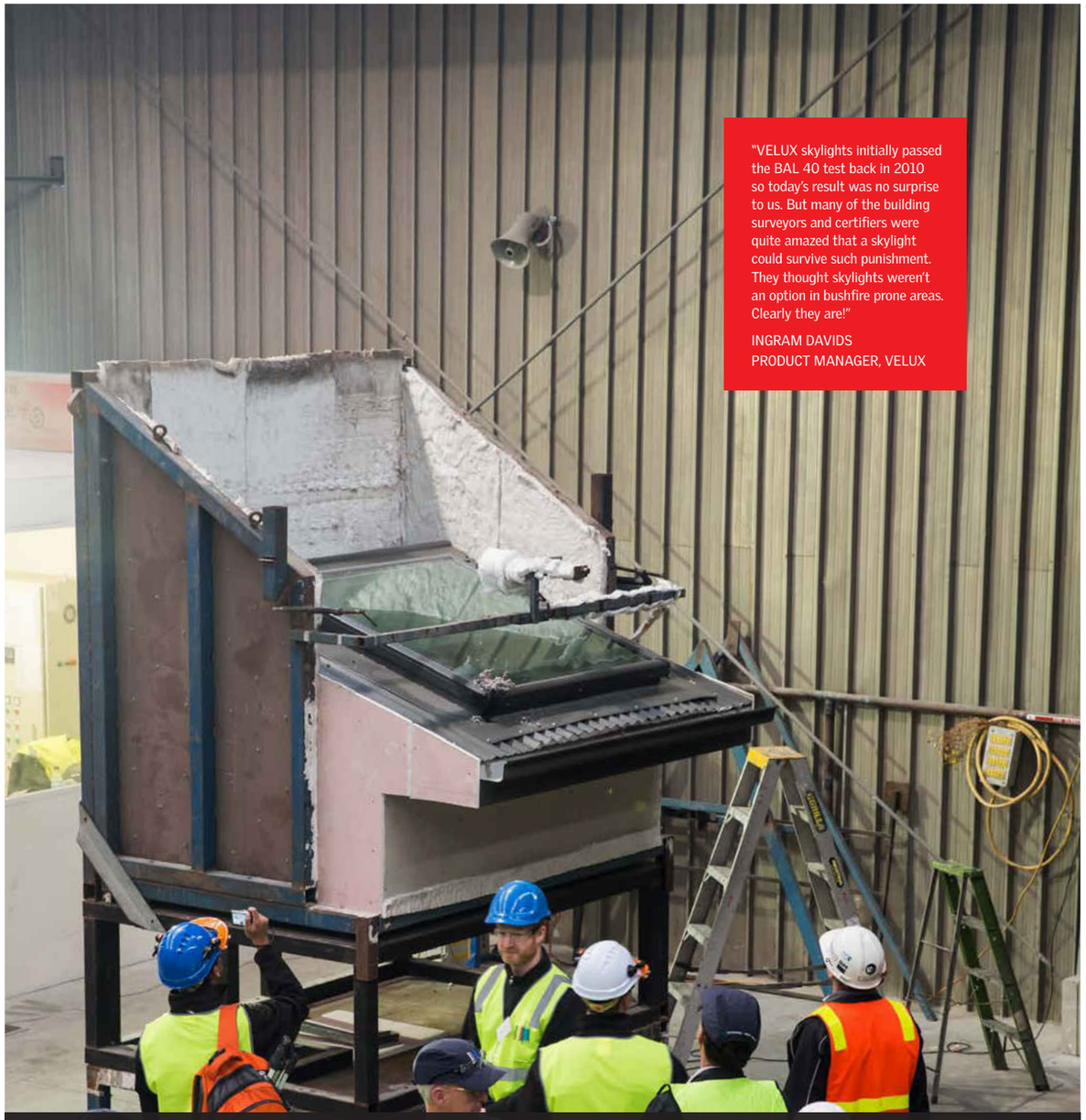
3 Feeling the heat

Most bushfires come and go within 2-5 minutes but the VELUX skylight has to endure 10 minutes of excruciating heat. At the height of the test you can see smoke coming from the VELUX skylight and you wonder if it will survive...



"VELUX skylights initially passed the BAL 40 test back in 2010 so today's result was no surprise to us. But many of the building surveyors and certifiers were quite amazed that a skylight could survive such punishment. They thought skylights weren't an option in bushfire prone areas. Clearly they are!"

INGRAM DAVIDS
PRODUCT MANAGER, VELUX

4 Passed

Believe it or not, the VELUX skylight survived almost unscathed. During the cooling off period, the outer pane broke due to the temperature difference between the red hot furnace and the cool Melbourne day. The inner pane remained intact and the BAL 40 test was passed. VELUX is a skylight to trust if you live in a bushfire prone area.

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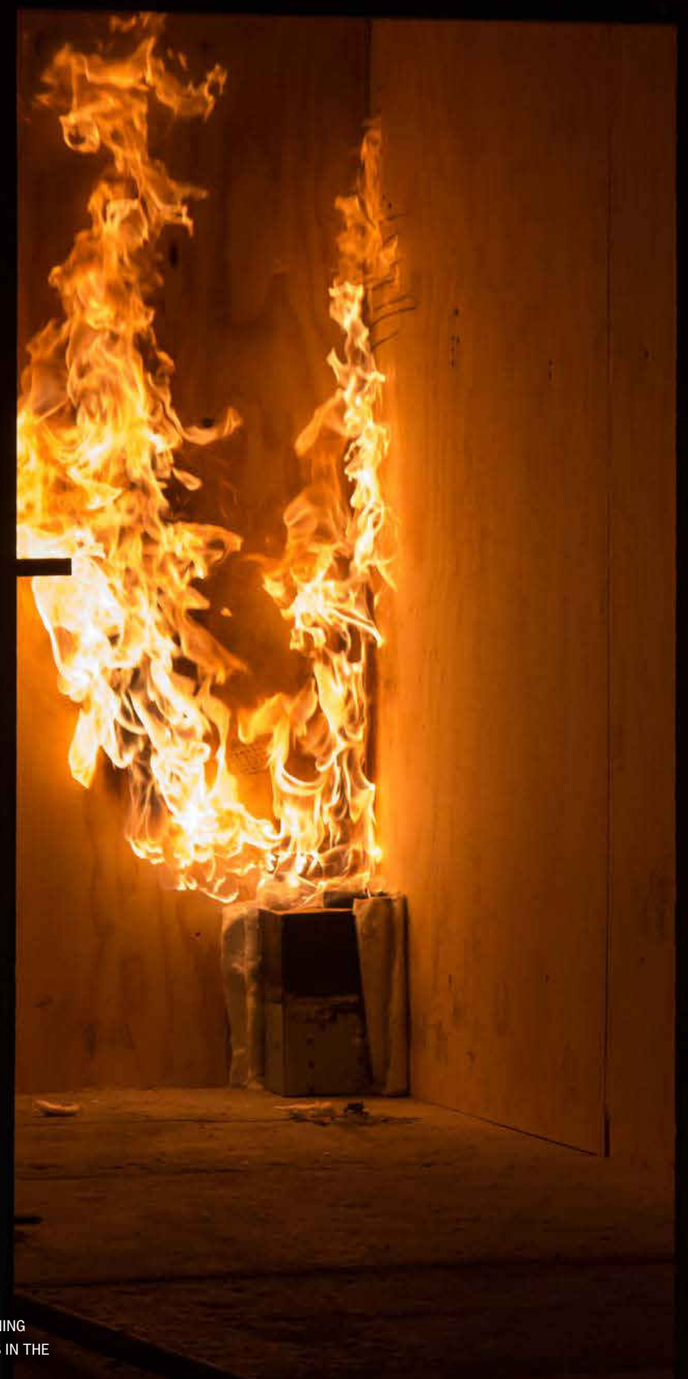

STANDARD PLYWOOD LINING LASTED ONLY 6 MINUTES IN THE ROOM CORNER TEST...

Only the best are

BUILT TO LAST...

FIRE DOOR TEST

What's the difference between a standard timber door and a fire resistant door? The standard door started smoking less than two minutes into the test – within another minute it was in flames. Meanwhile hardly any smoke had appeared from the fire resistant door. Could well be the difference between life and death...

FIRE CABLE/TRAY TEST

Fire resistant cables and cable trays can help contain fires and reduce smoke, toxic gasses and heat release. They also ensure that security systems like alarms, video surveillance and smoke ventilation keep working after a fire has started. The test went on for an hour... plenty of time to get out of almost any building in case of fire.

ROOM CORNER TEST

How does a fire develop inside a room lined with Group 3 plywood? In a word: fast! The test was an AS ISO 9705 room corner test. A gas burner was placed in a corner, releasing heat at a rate of 100kW for 10 minutes and 300kW for another 10 minutes. When flashover occurs, the test is over. In this case the test lasted less than 6 minutes...

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Industry experts were

BLOWN AWAY...

"SURREAL WATCHING A SKYLIGHT PASS A BAL 40 TEST – BUT VELUX WAS ALWAYS GREAT QUALITY"

"THE TESTS WERE PERFECT EXAMPLES OF WHY CERTIFICATION IS NEEDED TODAY"

"GREAT DAY! YOU CAN'T BEAT THE PHYSICAL DEMONSTRATION OF HOW PRODUCTS PERFORM"

"I HAVEN'T EXPERIENCED THIS TYPE OF TEST IN ALL MY YEARS IN THE INDUSTRY"

"What a fantastic day. I saw so many things I wouldn't otherwise have seen. Until recently I lived in a bushfire prone area and I thought skylights had to be severely guarded with metal flyscreens or would be incredibly expensive. VELUX is obviously a fairly standard product and easy to incorporate into a property."

CHRIS STEVENSON, NATIONAL CONSTRUCTION MANAGER, HUTCHINSON BUILDERS

"I had a great day with many highlights. I think the door test and the room test were eye-openers for many... and who would have thought that a skylight could pass a BAL 40 bushfire test? I didn't know VELUX when I arrived but it performed extremely well in the test. Very interesting!"

BRETT DUNDULES, SENIOR TECHNICAL OFFICER FIRE PROTECTION ASSOCIATION AUSTRALIA (FPA)

"It was a very successful day, I hope they'll do more. Most visitors had never attended fire testing before and seeing it first hand gives a better understanding. I didn't know VELUX complied with BAL 40 – I actually thought you couldn't use skylights in bushfire prone areas. We could integrate our roof systems with VELUX..."

ROSS JACKSON, MANAGING DIRECTOR TBA FIREFLY

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Exova Warringtonfire

On a cold Melbourne day, Exova Warringtonfire welcomed close to 100 building surveyors and certifiers to its inaugural Certifiers Education Day. But the heat was on inside. Before the day was over, they had witnessed four destructive tests – one involving a VELUX skylight facing Exova's red hot new furnace in a bushfire test. The temperature was 1100ºC...

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VELUX Australia Pty Ltd
78 Henderson Road
Alexandria NSW 2015
Telephone: 1300 859 856
Fax: (02) 9550 3289
Email: customer.service@VELUX.com.au
Website: www.VELUX.com.au

Exova Warringtonfire

Exova Warringtonfire
2/409-411 Hammond Road
Melbourne VIC 3175
Telephone: (03) 9767 1000
Fax: (03) 9767 1001
Email: globalfire@exova.com
Website: www.exova.com