warringtonfire

Summary of assessment

Sponsor name	Unitex Australia Pty Ltd	**Document no**	FAS180457 SOA3.1[1]
Sponsor address	No. 96 Prosperity Way, Dandenong, South VIC 3175, Australia		
Issue date	9 January 2024	**Expiry date**	31 December 2028

Description of assessed system

The assessed system consists of concrete panel junctions when connected using steel joiner plates and angle brackets protected with Unitex® Panel Patch – in accordance with AS 1530.4:2014.

Assessed system performance

The element of construction described above was assessed by this laboratory on behalf of the report sponsor in accordance with the stated test standard in Table 1 and achieved the results outlined in Table 2. A complete description of the assessed construction can be found within the referenced assessment report(s) or regulatory information report(s).

Table 1 Test standard and assessment report details

Referenced report	Test standard	Referenced report issue date	Referenced report expiry date
FAS180457 R3.1	AS 1530.4:2014	9 January 2024	31 December 2028
FAS180457 RIR3.1	AS 1530.4:2014	9 January 2024	31 December 2028

Table 2 Formal assessment summary

System	Assessment outcome
Flat steel jointer plates and angle brackets protected with Unitex® Panel Patch, 25 mm (at location with double layer steel) and 35 mm (at location with single layer steel), one side exposed as detailed in Table 5 of the referenced reports.	Unitex® Panel Patch is able to maintain temperatures below 550 °C for a period of 240 minutes when exposed to AS 1530.4:2014 heating condition.
Concrete wall/floor panels and junction where: • The wall and floor panels are designed by an accredited structural engineer in accordance with AS 3600:2018 to have an established FRL of 240/240/240 for loadbearing wall/floor, or -/240/240 for non-loadbearing wall/floor. • The project's structural engineer has verified that all relevant factors, including the load, fixing, size and the quantity of steel joiner plates and angle brackets, are appropriate for a design in which the limiting steel temperature is below 550 °C. • The joint between the concrete panels is protected with an appropriate fire stopping product/system with an established FRL of minimum -/240/240, from an Accredited Testing Laboratory (ATL).	240/240/240 for loadbearing system when exposed to AS 1530.4:2014 heating condition. -/240/240 for non-loadbearing system when exposed to AS 1530.4:2014 heating condition.

Figure 1 to Figure 6 shows the assessed systems. The installation details are presented in Table 5 (schedule of components) of the referenced reports.

[1] This document was issued in conjunction with FAS180457 R3.1. The previous version of this document was SFC FAS180457.2. FAS180457 R3.0 was not issued.

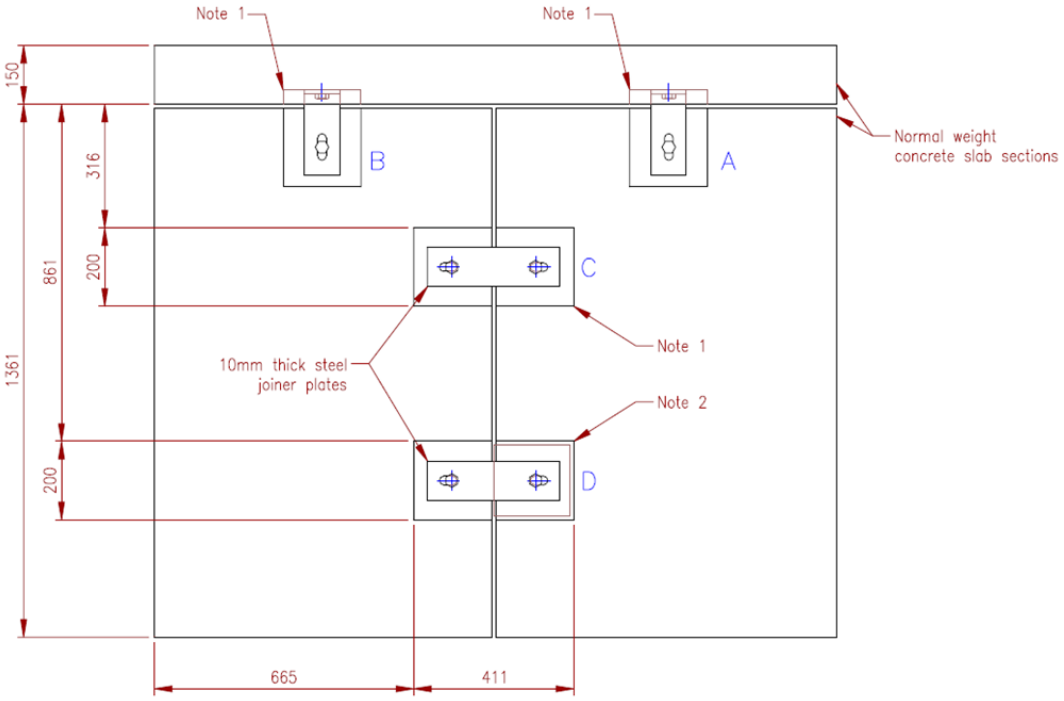

Figure 1 Concrete slab joint construction detail (1) as tested in WFRA 40938

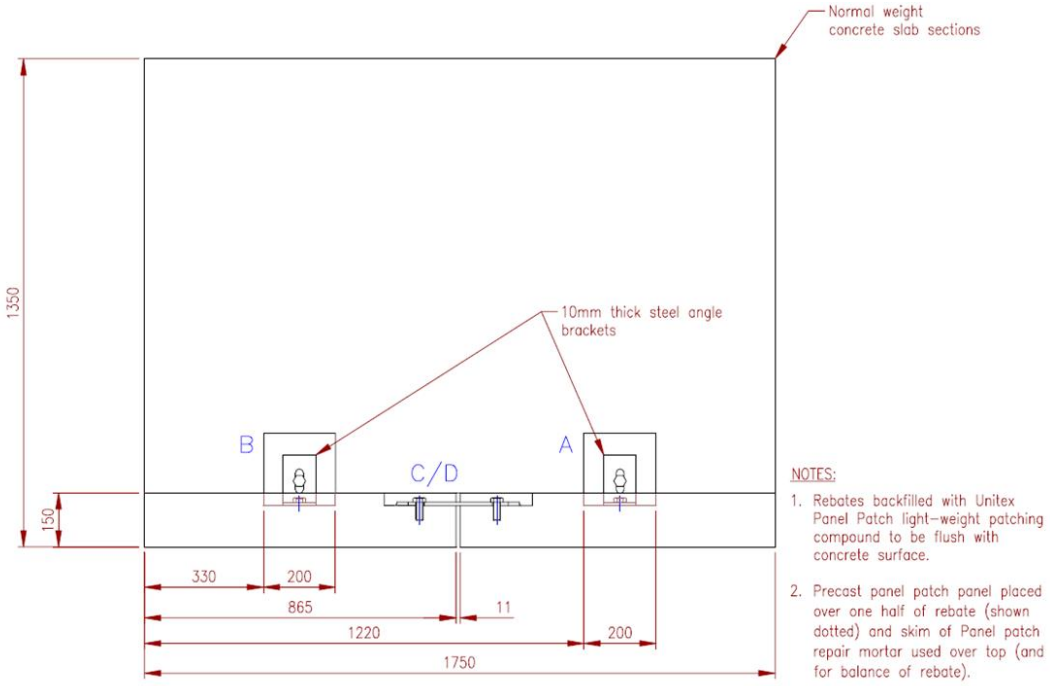

Figure 2 Concrete slab joint construction detail (2) as tested in WFRA 40938

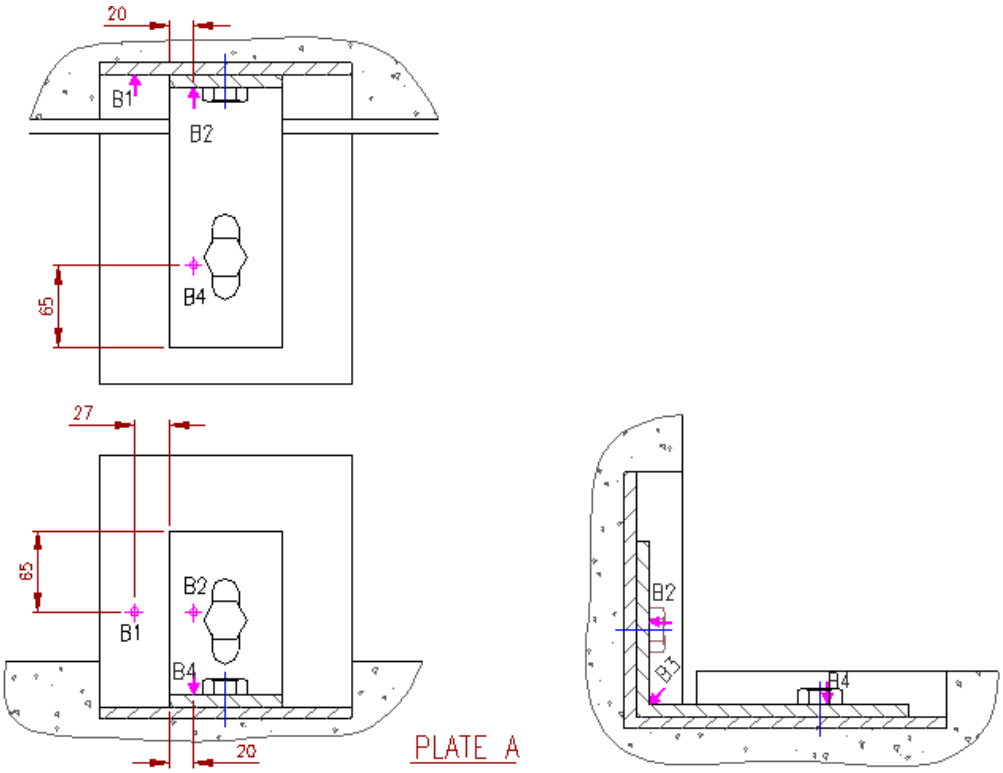

Figure 3 Corner joint construction detail as tested in WFRA 40938

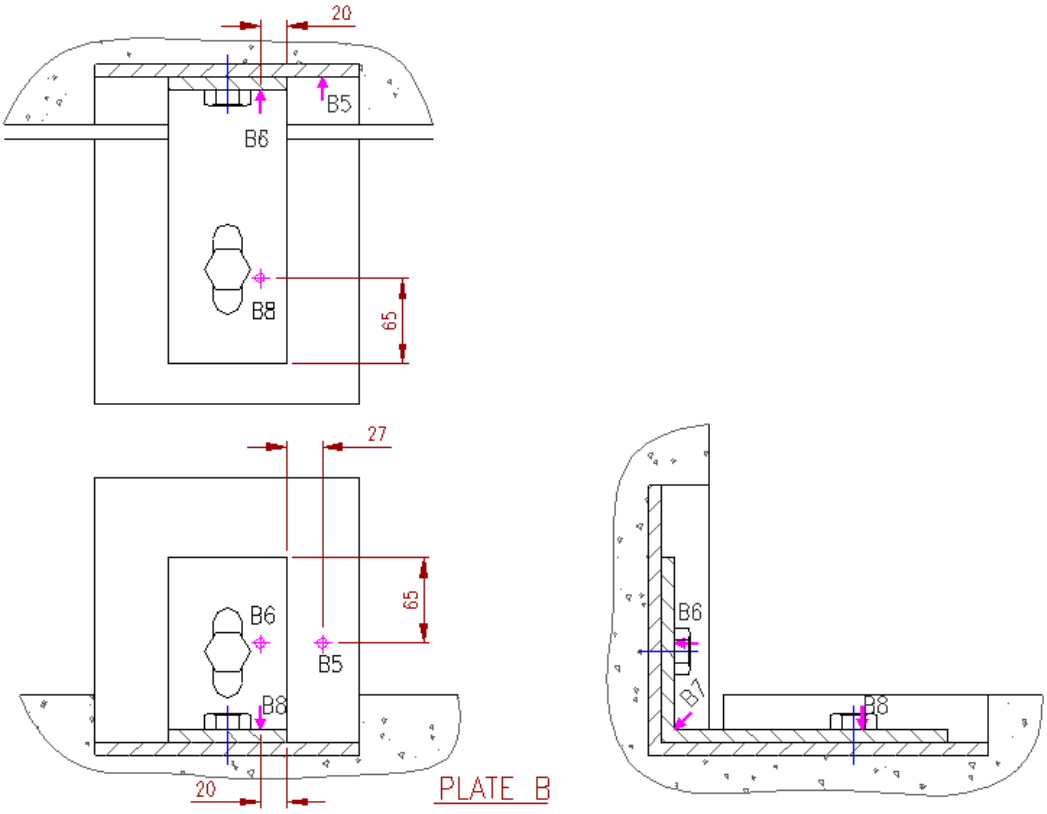

Figure 4 Corner joint construction detail as tested in WFRA 40938

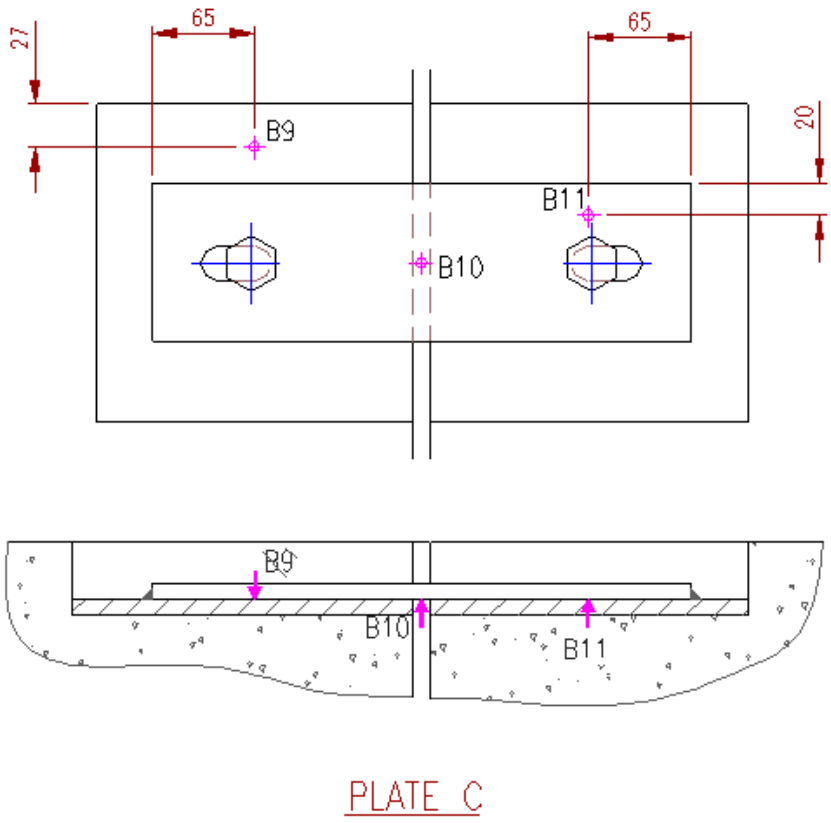

Figure 5 Butt-joint of slab construction detail as tested in WFRA 40938

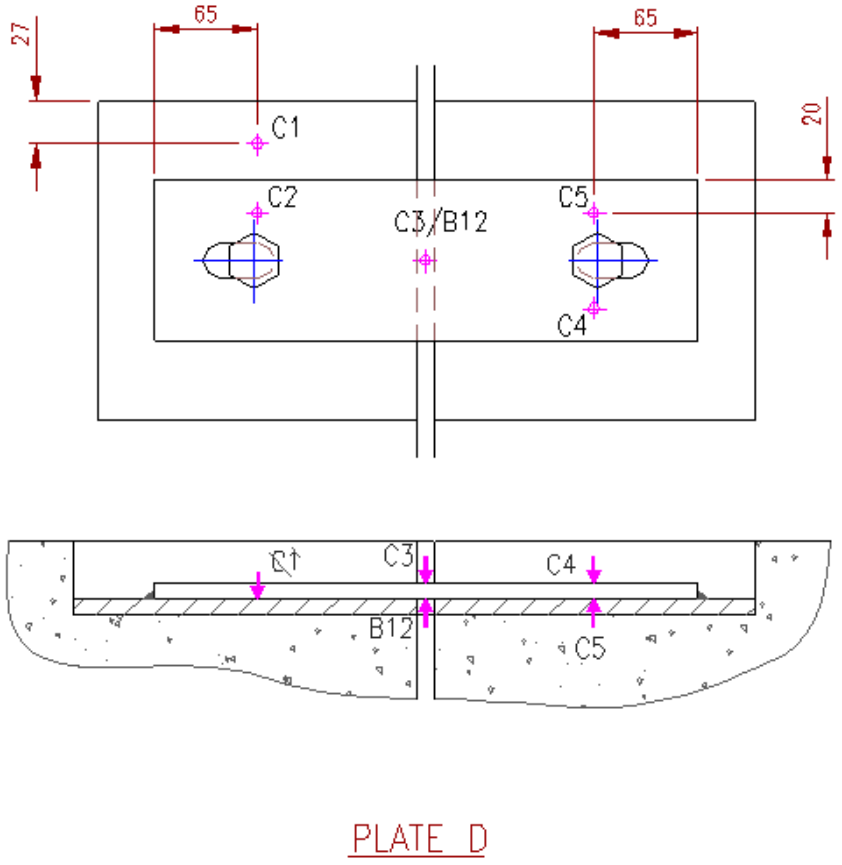

Figure 6 Butt-joint of slab construction detail as tested in WFRA 40938

Requirements and limitations

- This assessment applies to wall and floor systems exposed to fire from one side in accordance with the requirements of AS 1530.4:2014, where vertical elements must be exposed to heat from the direction required to resist fire exposure.
- The joint between the concrete panels must be protected with fire stopping material which has a tested/assessed FRL from an Accredited Testing Laboratory (ATL).
- The limiting steel temperature of the steel joiner plates and angle brackets must be not exceed 550 °C, as tested. The limiting steel temperature must be determined by the project's structural engineer considering all relevant factors.
- The concrete separating elements must be designed appropriately by the design engineer in accordance with AS 3600:2018[2] to have sufficient thickness to maintain the required FRL.

Conditions / validity

- This document is provided for general information only and does not comply with the regulatory requirements for evidence of compliance.
- The RIR (regulatory information report) or the main assessment report must be provided for regulatory requirements and evidence of compliance.
- Reference should be made to the relevant assessment report or regulatory information report to determine the applicability of the test result to a proposed installation. Full details of the constructions and justification for the conclusions given, along with the validity statements, are given in the assessment reports.
- The results of the assessment report may be used to assess fire resistance, but it should be recognised that a single test method will not provide a full assessment of fire hazard under all conditions.
- All work and services carried out by Warringtonfire Australia are subject to and conducted in accordance with our standard terms and conditions. These are available on request or at https://www.element.com/terms/terms-and-conditions.

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[2] Standards Australia, 2018, Concrete structures, AS 3600:2018 (Incorporating Amendment No. 1), Standards Australia, NSW.