IN THE GENERAL DIVISION OF
THE HIGH COURT OF THE REPUBLIC OF SINGAPORE

[2026] SGHC 239

Originating Claim No 259 of 2023

Between

RBC Trust Company (Singapore) Limited in its capacity as former Trustee of ESR-Logos REIT (formerly known as RBC Investor Services Trust Singapore Limited)

… *Claimant*

And

Chip Soon Aluminium Private Limited

… *Defendant*

JUDGMENT

[Tort — Negligence — Breach of duty]
[Tort — Negligence — Duty of care]
[Tort — Negligence — Fire]

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RBC Trust Co (Singapore) Ltd
v
Chip Soon Aluminium Pte Ltd

[2026] SGHC 239

General Division of the High Court — Originating Claim No 259 of 2023
Andre Maniam J
21, 22, 25, 26 August, 8–10, 17–19 September, 27 November 2025, 28 May, 3 July 2026

24 November 2026 Judgment reserved

Andre Maniam J:

Introduction

1 A fire occurred on 4 May 2017 at 30 Toh Guan Road (the "Building"), the external cladding of which was aluminium composite panels ("ACPs").

2 ACPs consist of 2 layers of aluminium skins sandwiching a fire rated low density polyethylene ("LDPE") core. LDPE is, by nature, combustible, whereas the aluminium skins of the ACPs are, by nature, non-combustible.

3 The central question in this case is whether the ACPs supplied by the defendant ("Chip Soon") for use as external cladding of the Building met fire safety requirements. The claimant ("RBC"), the owner of the Building, sued Chip Soon in negligence for having supplied non-compliant ACPs. RBC says that this caused or contributed to the loss and damage from the fire.

4 If the ACPs were in fact compliant with fire safety requirements, RBC's claim against Chip Soon fails. If the ACPs were non-compliant, further issues fall to be determined, including whether Chip Soon was negligent for supplying non-compliant ACPs, and whether RBC was contributorily negligent.

Agreed facts

5 The parties agree on the following background facts.

6 Chip Soon was, at all material times, the sole distributor in Singapore for ACPs of the Alubond brand.[1]

7 Chip Soon had a Certificate of Conformity ("COC") no. 012566 in respect of "Alubond u.s.a FR (630) & Alubond u.s.a FR (430)" ("FR (630)" and "FR (430)", respectively) issued on or around 15 April 2011 and revised on or around 24 August 2011 based on test reports conducted by Exova Warringtonfire and submitted to TUV SUD PSB Pte Ltd ("TUV SUD") ("2011 COC").[2] In 2013, Alubond ACPs supplied under that COC failed a surveillance test.[3] That COC was then terminated on or around 5 April 2013.[4]

8 On or around 17 July 2013, COC no. CLS2 13 07 80802 001 in respect of "Alubond USA" model "FR B1" was issued to Chip Soon ("2013 COC").[5] Chip Soon had sent samples of FR B1 Alubond ACPs to TUV SUD for tests to

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1 Set Down Bundle dated 8 August 2025 ("SDB") at p 59 (s/n 3).

2 SDB at p 59 (s/n 4); Chronological Bundle of Documents ("CBOD") vol 1, 257.

3 SDB at p 59 (s/n 6).

4 SDB at p 59 (s/n 5); 3CBOD 985–986.

5 SDB at p 59 (s/n 7); 3 CBOD 1044–1045.

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be carried out on the core of the Alubond ACPs.[6] This 2013 COC remained valid until its expiry date on 16 July 2016.[7]

9 In or around November 2013, RBC engaged Centra Jaya (S) Pte Ltd (the "Contractor") to carry out works at the Building which included the installation of cladding comprising ACPs onto the exterior wall of the Building.[8] For the purposes of that cladding installation, it was agreed in or around December 2013 between the Contractor and Chip Soon that the latter would supply Class '0' fire rated FR B1 Alubond ACPs.[9] The Alubond ACPs were supplied by Chip Soon pursuant to nine purchase orders which were issued by the Contractor in 2014.[10]

10 The Singapore Civil Defence Force ("SCDF") Fire Code 2013 ("Fire Code 2013") was the applicable version of the Fire Code in relation to the Alubond ACPs supplied and installed at the Building.[11]

11 The effective date of the SCDF's Fire Safety Guidelines FSG 1:2013 ("FSG 1:2013") was 5 August 2013.[12]

12 Chip Soon knew or ought to have known that the Alubond ACPS supplied for cladding installation on the exterior wall of the Building should be

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6 SDB at p 59 (s/n 8).

7 3 CBOD 1044.

8 SDB at pp 59–60 (s/n 9); 3 CBOD 1064–1072.

9 SDB at p 60 (s/n 10).

10 SDB at p 60 (s/n 11).

11 SDB at p 60 (s/n 12); 2 CBOD 347–808.

12 SDB at p 60 (s/n 13); 3 CBOD 1048–1061.

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FR B1 Alubond ACPs and of Class '0' standard as required by the SCDF Fire Code 2013.[13]

13 At all material times, Chip Soon, provided, supplied and/or sold Alubond ACPs for use at the Building and these Alubond ACPs were used for cladding on the exterior wall of the Building and were installed on the Building.[14] Chip Soon supplied and delivered the Alubond ACPs for cladding installation on the exterior wall of the Building from 17 January 2013 to 12 August 2014.[15]

14 The fire which took place on 4 May 2017 spread vertically up the exterior of the Building.[16]

15 After the fire, the SCDF conducted investigations which included removing samples of the Alubond ACPs from the Building and sending the same to TUV SUD for testing.[17]

16 TUV SUD issued its Test Report no. 7191162486-mec17-ywa dated 17 May 2017 which stated that the sample of cladding tested indicated a Class '2' Surface Spread of Flame.[18]

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13 SDB at pp 60–61 (s/n 14).

14 SDB at p 61 (s/n 15).

15 SDB p 61 (s/n 16).

16 SDB at p 61 (s/n 17–18).

17 SDB at pp 61–62 (s/n 19).

18 SDB at p 62 (s/n 20); 6 CBOD 2691.

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17 By a letter dated 23 August 2017, the SCDF informed Chip Soon that the SCDF investigations into the fire at the Building on 4 May 2017 had "revealed improper use of composite panels on the building's external walls".[19]

18 On or around 24 August 2017, the SCDF issued a news release in relation to the fire at the Building. The local distributor referred to in the news release was the supplier of ACPs to the Building, *ie*, Chip Soon.[20]

19 In or around August 2017, following a request from the Contractor, TUV SUD issued Test Report No. 7191165640-FAC17-ZJ/LXB/ZY/CLH.[21]

20 Chip Soon owed a duty of care to RBC to ensure and/or to take reasonable care to ensure that the Alubond ACPs supplied for cladding installation on the exterior wall of the Building were FR B1 Alubond ACPs and of Class '0' standard as required under the SCDF's Fire Code 2013.[22]

Issues

21 I address the following issues:

(a) What was required under the fire safety requirements?

(b) Were the ACPs supplied by Chip Soon for the Building non-compliant with the fire safety requirements?

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19 SDB at p 62 (s/n 21); 6 CBOD 2749–2752.

20 SDB at p 62 (s/n 22–23); 6 CBOD 2753–2755.

21 SDB at p 62 (s/n 24); 6 CBOD 2607–2644.

22 SDB at p 62 (s/n 25).

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(c) If the ACPs were non-compliant, had Chip Soon breached its duty of care to supply compliant ACPs?

(d) If Chip Soon was negligent, was RBC contributorily negligent?

What was required under the fire safety requirements?

Fire Code 2013

22 It is common ground that the Fire Code 2013 was applicable in the present case, and that the Alubond ACPs had to meet Class '0' as per the Fire Code 2013 to be used for external cladding.[23] This entailed the ACPs (among other things) being Class 1 if tested for surface spread of flame in accordance with British Standard: Fire tests on building materials and structures ("BS 476") Pt 7 (cl 3.13.2 of the Fire Code 2013).[24]

23 There is, however, a dispute as to whether FSG 1:2013 formed part of the Fire Code 2013 as well as whether the ACPs were required to be tested on their aluminium face, *ie*, in their composite form, as they would be installed on the Building, or tested to the core material of composite construction.

24 In brief, Chip Soon contends that the ACPs were to be tested on their aluminium face (in which case they would have passed the tests),[25] whereas RBC contends that the APCs were to be tested to the core material of composite

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23 SDB at p 60 (s/n 10 and 12).

24 2 CBOD 495

25 Defendant's Closing Submissions dated 7 November 2025 ("DCS") at paras 55 and 92.

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construction (in which case RBC says the ACPs failed the tests, but Chip Soon disputes this).[26]

25 Clause 3.5.4 of the Fire Code 2013 requires that ACPs to be used as external cladding shall have a "surface complying with the requirements for Class '0'".[27]

26 Clause 3.13.1 of the Fire Code 2013 states:[28]

> Any reference to a surface being Class 0 shall be construed as a requirement that
>
> …
>
> (b) The surface material (or, if it is bonded throughout to a substrate, the surface material in conjunction with the substrate) shall have a surface of Class 1 and if tested in accordance with BS 476: Part 6 shall have an index of performance (I) not exceeding 12 and a sub index (i) not exceeding 6.

27 Clause 3.13.2 of the Fire Code 2013 states:[29]

> Any reference to a surface being of a class other that [sic] Class 0 shall be construed as a requirement that the material which the wall or ceiling is constructed shall comply with the relevant test criteria as to surface spread of flame specified in relation to that class in BS 476: Part 7.

28 Under BS 476 Pt 7, a surface is Class 1 if the tested spread of flame generally does not exceed a limit 165mm.[30] I discuss this further at [57]–[60] below.

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26 Claimant's Closing Submissions dated 7 November 2025 ("CCS") at para 22.

27 2 CBOD 475.

28 2 CBOD 496.

29 2 CBOD 496.

30 3 CBOD 1117, table 2.

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29 Further, BS 476 Pt 7 provides in clause 5.2 that "[t]he product shall be tested on that face which is normally exposed in practice".[31]

Fire safety guidelines

30 On 15 August 2008, the SCDF issued a circular introducing the Fire Safety Guidelines FSG 1:2008 ("FSG 1:2008") for "Certification of Regulated Fire Safety Products / Materials", effective from that date.[32] FSG 1:2008 was then included as Appendix 15 of the Fire Code 2013.[33]

31 Annex A of FSG 1:2008 provides as follows, regarding item 6 ("Cladding to External Wall eg. Composite panel"):[34]

> BS 576 Pt 6 & 7 (applicable to the core material of composite construction) or
>
> UBC 26-9 (for core containing plastics)

32 Chip Soon acknowledges that the above purported to introduce the requirement that the BS 476 Pts 6 & 7 tests be done to the "core material of the composite construction",[35] but argues that that was:

(a) contrary to the Fire Code 2013;

(b) internally inconsistent within FSG 1:2008; and

(c) inconsistent with BS 476 Pt 7.[36]

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31 3 CBOD 1104.

32 1 CBOD 182.

33 2 CBOD 737–744.

34 2 CBOD 740

35 CWS at para 60.

36 CWS at paras 63 and 65–92.

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Interplay between the Fire Code 2013 and FSG 1:2008

33 Chip Soon submits that under the Fire Code 2013, the BS 476 Pts 6 & 7 tests were to be done to the aluminium surface of the ACPs, whereas under FSG 1:2008, the tests were to be done to the core of the ACPs. Chip Soon says this is an inconsistency to be resolved by the Fire Code 2013 prevailing, *ie*, the tests being done to the aluminium skin of the ACPs, notwithstanding what the FSG 1:2008 provides.[37]

34 Chip Soon says that under s 55(4) of the Fire Safety Act (Cap 109A, 2000 Rev Ed) ("FSA (2000)") (now s 106(4) of the Fire Safety Act 1993 (2020 Rev Ed) ("FSA (2020)"), the Fire Code prevails over circulars issued by the SCDF such as FSG 1:2008.[38] I do not agree.

35 Section 55 of the FSA (2000) in the form effective from 1 September 2013 provided as follows:

> **Adoption of codes and standards**
>
> **55.**—(1) Any regulations made under section 61 may adopt (wholly or partially or as amended by the regulations or by reference) any code, standard, rule, specification or provision which relates to any matter with which the regulations deal and which is —
>
> (a) recommended, issued or adopted by the Singapore Productivity and Standards Board;
>
> (b) recommended, issued or adopted by any other standards organisation or body of any place outside Singapore being an organisation or body approved by the Commissioner; or
>
> (c) included in any document issued by any Government department or issued by the public authority constituted under any written law.

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37 CWS at paras 65–70

38 CWS at para 69.

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> ……
>
> (4) Unless otherwise provided in any regulations made under section 61, in the event that any code, standard, rule, specification or provision adopted under subsection (1) is inconsistent with the Code of Practice for Fire Precautions in Buildings published by the Commissioner, the Code of Practice for Fire Precautions in Buildings shall prevail.

36 Section 61 of the FSA (2000) provided as follows:

> **Regulations**
>
> **61.**—(1) The Minister may make regulations for carrying out the purposes and provisions of this Act as he considers necessary and for any matter which is required under this Act to be prescribed and, in particular, the Minister may make regulations in respect of all or any of the following matters:
>
> **…**…

37 Section 2 of the FSA (2000) defined "Fire Code" as follows:

> "Fire Code" means the Code of Practice for Fire Precautions in Buildings published by the Commissioner as amended or remade from time to time, and includes any code, standard, rule, specification or provision adopted under section 55

38 Under s 61 the Minister might make regulations for various matters. If the regulations made under s 61 were inconsistent with the Fire Code (also known as the Code of Practice for Fire Precautions in Buildings published by the Commissioner), the Fire Code would prevail under s 55(4). Under s 55(1), such regulations (made under s 61) might adopt various codes, standards, rules, specifications or provisions. However, Chip Soon did not establish that FSG 1:2008 was adopted by any regulations made by the Minister under s 61, such that pursuant to s 55(4) the Fire Code was to prevail in the event of any inconsistency.

39 Rather, FSG 1:2008 formed part of the Fire Code 2013, having been incorporated as Appendix 15 of the Fire Code 2013, and as such what the testing

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of ACPs required should be reckoned by construing the text of the main body of the Fire Code 2013 together with FSG 1:2008 as an Appendix.[39] For completeness, FSG 1:2008 was issued when the applicable version of the Fire Code was the Fire Code 2007,[40] but cll 3.54 and 3.13 of the Fire Code 2007 and the Fire Code 2013 are identical.

40 I interpret FSG 1:2008, as part of the Fire Code 2013, as follows:

(a) Clauses 3.54 and 3.13 of the Fire Code 2013 *generally* provided the standard that ACPs were required to meet when tested based on BS 476 Pts 6 & 7;

(b) FSG 1:2008 *specifically* provided that the ACPs were to be tested to the core (and not the surface);

(c) that specific stipulation in FSG 1:2008 prevailed over what would otherwise be the position under BS 476 Pt 6 & 7, *ie*, testing would be done to the surface of the ACPs;

(d) there was no inconsistency between what the FSG 1:2008 required and what cll 3.54 and 3.13 of the Fire Code 2013 required, in that those clauses of the Fire Code 2013 said nothing about whether it was the surface or the core of the ACPs that was to be tested; and

(e) if anything, the tenor of s 55 of the FSA (2000) supports this interpretation, in that a specific stipulation by the SCDF/Commissioner should prevail over a general stipulation in a foreign standard like BS 476 Pt 7.

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39 As RBC argues in CWS at paras 32–33.

40 1 CBOD 110.

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Internal consistency within FSG 1:2008

41 Chip soon says that FSG 1:2008 is internally inconsistent because:

(a) Annex A of FSG 1:2008 provides that the ACPs are to be tested to the "core material of composite construction";[41] but

(b) paragraph 4 provides that "[t]he fire safety products/materials shall be installed in the manner as the tested prototype described in the test report".[42]

42 Chip Soon says that paragraph 4 of FSG 1:2008 required the ACPs to be installed with only one aluminium skin on, and the core exposed, but that was not done: the ACPs were installed with both aluminium skins on, although they were tested with only one aluminium skin on, and the core exposed.[43] That is not how I understand the language or spirit of para 4 of FSG 1:2008. That paragraph relates to the manner of installation, which should not differ between the tested prototype and the fire safety products/materials that are installed. The object was to ensure that the performance of the products/materials installed did not fall short of that of the prototype tested.

43 Chip Soon does not say that there was any material difference between the *manner of installation* of the ACPs used at the Building, and the tested specimens – the ACPs were fixed in place for testing, and they were fixed in place when installed at the Building. Rather, Chip Soon points to a difference in the *characteristics* between the ACPs installed at the building, and the tested

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41 2 CBOD 740.

42 1 CBOD 184; DWS at paras 71–86.

43 DWS at para 73.

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specimens, a difference that arises from what was prescribed in Annex A, that the tests be done to the "core material of composite construction". As Chip Soon recognises, SCDF's intention was to test the weakest link in the product, *ie, the LDPE core.*[44]

44 In the case of the ACPs, the installed ACPs, with both aluminium skins, would outperform the tested samples with only one aluminium skin, and the core exposed. In terms of promoting fire safety, it was sensible both to test the "core material of composite construction", and then to install the ACPs in their original form, *ie*, with both aluminium skins. Put another way, the FSG 1:2008 did not require the ACPs to first be tested to their core, and then installed with the core exposed – that would have made no sense.

45 Chip Soon also says that the testing requirements under the FSGs varied over time:

(a) FSG 1:2008 stated "BS 476 Pt 6 & 7 (applicable to the core material of composite construction)";

(b) FSG 1:2013 dated 5 August 2013 and 24 June 2014 then prescribed the following for item 35 of Annex A ("Composite Panel (Cladding to External Wall)"): "1. BS 476 Pt 4, BS 476 Pt 11, BS 476 Pt 7, BS 476 Pt 6 & BS 476 Pt 7, EN 13501-1 (applicable to the core material of composite construction) or NFPA 285".[45]

46 Chip Soon argues that the language of FSG 1:2013 only required testing to the core material of composite construction for EN 13501-1 (the European

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44 DCS at para 62.

45 DCS at paras 75–78; 3 CBOD 1056; 5 CBOD 1722.

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standard that classifies construction productions and building materials by their reaction to fire) but not for the other standards listed before it, such as BS 476 Pt 6 and BS 476 Pt 7. This would be a complete reversal from the BS 476 Pts 6 & 7 core testing that was required by FSG 1:2008.[46] I do not agree with this reading. Although a comma separated EN 13501-1 from the standards listed before it, that did not mean that the phrase "(applicable to the core material of composite construction)" only applied to EN 13501-1 and not those other standards. I interpret FSG 1:2013 as requiring core testing for all of the standards up to including EN 13501-1, and not EN 13501-1 alone (to the exclusion of BS 476 Pts 6 & 7). The fact that this interpretation is consistent with what FSG 1:2008 had expressly required in relation to BS 476 Pts 6 & 7 reinforces my conclusion. I see no reason for the SCDF to have required BS 476 Pts 6 & 7 core testing under FSG 1:2008, then to have done a U-turn in FSG 1:2013 and accepted BS 476 Pts 6 & 7 testing of the aluminium skin, while requiring core testing if EN 13501-1 were used. That makes no sense.

Interplay between FSG 1:2008 and BS 476 Pt 7

47 I have already addressed the interplay between FSG 1:2008 and BS 476 Pt 7 above (at [40]). Put simply, while BS 476 Pt 7 required testing of the surface of the ACPs, being the "face which is normally exposed in practice" (see [29] above), it was open to the Commissioner/SCDF to adopt BS 476 Pt 7 "wholly or partially or as amended" (in the language of s 55(1) of the FSA (2000)), and what the Commission/SCDF decided would then prevail over what BS 476 Pt 7 would otherwise have required.

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[46] DCS at paras 80–81.

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48 It is to no avail for Chip Soon to criticise the SCDF's departure from BS 476 Pt 7 by requiring core testing, by saying that core testing was not validated.[47] Validated or not, if core testing is what the SCDF required by FSG 1:2008, which formed part of the Fire Code, that is what the Fire Code required, and that is what had to be complied with.

49 It is noteworthy that TUV SUD understood core testing to be what was required when it conducted BS 476 Pt 7 tests, as did Chip Soon, from the time FSG 1:2008 was effective. Thus, as noted at [8] above, the 2013 COC (which Chip Soon relies on) was issued after TUV SUD tests on the core of the ACPs, for which Chip Soon had supplied fresh factory samples where the core was exposed (or could easily be exposed, without the need for delamination).

50 For the above reasons, I found that the Fire Code 2013 required the ACPs to be tested to the "core material of composite construction".

Were the ACPs supplied by Chip Soon for the Building non-compliant with the fire safety requirements?

51 RBC relies on various pieces of evidence to prove that the ACPs supplied by Chip Soon for the Building were non-compliant with fire safety requirements. RCB contends that the fact that ACPs taken from the Building failed the tests conducted by TUV SUD is in itself sufficient to prove that the ACPs were non-compliant, and in any case that this conclusion is supported by other evidence.[48]

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47 DCS at paras 40–41.

48 CCS at para 40.

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52 Chip Soon, on the other hand, contends that the TUV SUD test reports are unreliable,[49] and if those cannot be relied upon the other evidence is insufficient to prove that the ACPs were non-compliant.

53 To that, RBC maintained that even if the TUV SUD test reports were unreliable, the other evidence still proves that the ACPs were non-compliant.

54 I will first address the TUV SUD reports of tests conducted on ACPs taken from the Building, and then the other evidence.

The BS 476: Part 7 tests conducted by TUV SUD

Overview

55 BS 476 Pt 7 specifies a method for testing products for surface spread of flame. As noted above, to comply with Singapore fire safety requirements, ACPs used for external cladding had (among other things) to have a Class '1' surface spread of flame if tested in accordance with BS 476 Pt 7, and I agreed with RBC that with the introduction of FSG 1:2008, that entailed testing the ACPs to the "core material of composite construction" (with the LDPE core exposed), rather than the ACPs in the form in which they would be installed (with two aluminium skins sandwiching an LDPE core).

56 RBC relies on BS 476 Pt 7 tests done by TUV SUD to ACPs taken from the Building after the fire, which purported to show that the APCs were not Class '1',[50] but Chip Soon contends that the way in which TUV SUD conducted BS 476 Pt 7 tests makes the test reports unreliable, such that one cannot

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49 DCS at paras 91 and 170.

50 CCS at paras 39–45.

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conclude from them that the ACPs were non-compliant with fire safety requirements.[51]

The BS 476: Part 7 test method

57 Clause 1 of BS 764 Pt 7 (titled "Scope") specifies: (a) a method of test for measuring the lateral spread of flame along the surface of a specimen of a product; (b) a classification system based on the rate and extent of the spread of flame; and (c) provides data suitable for comparing the end-use performances of essentially flat materials, composites or assemblies, which are used primarily as the exposed surfaces of walls or ceilings.[52]

58 The test procedure involves exposing the test specimen to a pilot flame,[53] and recording:[54]

> … the time at which the front of sustained flaming, spreading along material present at the position of the horizontal reference line, crosses each vertical reference line", and "the extent of the spread of flame along material present at the position of the horizontal reference line after 1.5 min and 10 min…

59 Clause 11 and table 2 of BS 476: Pt 7 classify tested specimens based on spread of flame. A Class '1' classification entails a spread of flame with a limit of 165 mm at the 1.5 min point of the test, as well as 165 mm final spread of flame.[55] Further, the method prescribes a minimum of six test specimens,[56] of which at least five of the six shall have a spread of flame which does not exceed

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51 DCS at paras 96–135.

52 3 CBOD 1103.

53 3 CBOD 1115 (cl 9.1).

54 3 CBOD 1115 (clause 9.2.1).

55 3 CBOD 1116–1117.

56 3 CBOD 1104 (cl 5).

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the 1.5 min limit and the final limit specified for the designated class,[57] and the remaining specimen shall not exceed this limit by more than the tolerances given in table 2. In turn, table 2 prescribes that no more than one out of six test specimens may have a spread of flame limit of "165 + 25" mm at 1.5 min, and a final spread of flame of "165 + 25" mm.

60 Clause 3 defines "spread of flame" (cl 3.2) as "[p]ropagation of a flame front over the surface of a product under the influence of imposed irradiance",[58] and "flame front" (cl 3.3) as "[f]urthest extent of travel of a coherent flame along the reference line marked on the test specimen".[59] "Final spread of flame" as used in table 2 is a reference to "the maximum extent of spread of flame during the whole test, i.e. 10 min or less (see 9.1)" (per cl10.1),[60] and under cl 9.1(e) the test is terminated "when the flame front reaches the 825 mm reference line, or after 10 min has elapsed, whichever is the shorter".[61]

TUV SUD's BS 476: Pt 7 tests

61 Videos of BS 476 Pt 7 tests conducted by TUV SUD on ACPs were introduced into evidence. Although those tests did not involve ACPs taken from the Building, they are instructive as to how TUV SUD conducted BS 476 Pt 7 tests on ACPs.

62 Based on what the videos showed, Chip Soon contended that TUV SUD's method of conducting BS 476 Pt 7 tests was unreliable.

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57 3 CBOD 1116 (clause 11.1).

58 3 CBOD 1103.

59 3 CBOD 1103.

60 3 CBOD 1116.

61 3 CBOD 1115.

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63 As noted at [58] above, under cl 9.2.1 the relevant observations for classification purposes are:

> (a) when "the front of sustained flaming, spreading along material present at the position of *the horizontal reference line*, crosses each vertical reference line", and
>
> (b) the extent of the spread of flame along material present at the position of *the horizontal reference line* after 1.5 min and 10 min".

64 It is thus the spread of flame along the horizontal reference line that matters. Conversely, a spread of flame that crosses a vertical reference line, but does not touch the horizontal reference line, is not relevant. Further, there must be "sustained flaming", defined in cl 3.8 as the "[e]xistence of flame on or over the surface of the specimen for periods of over 3 s".[62] This may be contrasted with "flashing", defined in cl 3.6 as the "[e]xistence of a flame on or over the surface of the specimen for periods of less than 1 s",[63] or "transitory flaming", defined in cl 3.7 as the "[e]xistence of flame on or over the surface of the specimen for periods of between 1 s and 3 s".[64]

65 The videos of BS 476 Pt 7 tests done by TUV SUD suggest that TUV SUD's test reports were based on spread of flame that crossed vertical reference lines (as stated in the reports), but which did not touch the horizontal reference line at those points in time. That is not what BS 476: Pt 7 prescribes.

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62 3 CBOD 1103.

63 3 CBOD 1103.

64 3 CBOD 1103.

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66 First, there is a February 2018 video of the test of the fifth specimen provided by AVA Global Pte Ltd ("AVA Global") which was obtained from Tampines Town Hub.[65] The ACPs submitted by AVA Global were Alubond ACPs that were supplied by Chip Soon.[66] The corresponding test report is TUV SUD's Test Report No. 7191180264-MEC18-YWA dated 15 February 2018.[67]

67 The test report states that specimen 5 had no spread of flame at the 1.5 min mark, but thereafter the spread of flame was as follows:[68]

(a) Start of flaming at 5 mins 40 s (recorded as 5.40);

(b) 75 mm at 5 mins 40 s;

(c) 165 mm at 5 mins 53 s

(d) 190 mm at 6 mins 13 s;

(e) 215 mm at 7 min 1 s;

(f) 240 mm at 7 min 37 s; and

(g) maximum spread of flame 240–265 mm at 8 min 24s.

68 TUV SUD's conclusion in respect of the six specimens tested, was that the classification was Class '2', not Class '1'.[69]

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65 Defendant's supplementary bundle of documents dated 28 August 2025 ("DSB") at Tab 2, Item No. 4.

66 NE 8 September 2025, page 114, lines 22–24.

67 DSB Tab 3.

68 DSB Tab 3, page 25.

69 DSB Tab 3 at page 26.

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69 The video of the test of specimen 5, however, shows that that there was no flaming at the horizontal reference line at or around the 5 min 40 s mark (contrary to the test report which records 75 mm flame spread at that time).[70]

70 The test operator who conducted the test, Mr Ye Wint Aung ("Ye") of TUV SUD was asked about this. His testimony was initially that he could see small flaming between lines "0" and "1" marked out on the glass panel through which the specimen could be viewed, *ie*, between the 75 mm and 165 mm vertical reference points, respectively.[71] However, after the video was played again, Ye agreed that the video did not show flaming at the horizontal reference line at the 5 min 40 s mark although that was recorded in the test report; however he maintained that he had observed that in person, looking at the specimen.[72]

71 There are similar discrepancies between the video and the test report for subsequent observations. Despite what the test report records, the video does not show:

(a) flaming at the horizontal reference line at the 165 mm vertical reference line at the 5 mins 53 s mark;[73]

(b) flaming at the horizontal reference line at the 190 mm vertical reference line at the 6 mins 13 s mark,;[74] and

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70 DCS para 142.

71 NE 28 August 2025 at p 52 lines 6–23 and p 56 lines 16 to p 57 line 14.

72 NE 28 August 2025 at p 58 lines 7–18, p 59 line 24 to p 60 line 6.

73 DCS at para 145; NE 28 August 2025 at p 61 lines 16–23.

74 DCS at para 145; NE 28 August 2025 at p 62 lines 12–17.

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(c) flaming at the horizontal reference line at the 215 mm vertical reference line at the 7 mins 1 s mark.[75]

72 I cannot accept Ye's evidence that the test report records what TUV SUD (*ie*, he) saw when he looked at the specimen itself during the test. It is too much of a coincidence that the video shows the flame spread reaching the vertical reference lines (*but not the horizontal reference line*) at the timings recorded in the test report, yet (as Ye says) in reality the flame spread *also reached the horizontal reference line* at exactly those timings, as viewed by him (but that is not visible from the video, and indeed is contrary to what is shown on the video).

73 There is then a September 2017 video of the BS 476 Pt 7 test conducted by TUV SUD on ACPs from the building "JTC Space", a test conducted for Positive Engineering Pte Ltd.[76] TUV SUD provided the video of the test of specimen 5 (said to start at 6 mins 26 mins "when flaming starts"),[77] and a draft test report bearing Ye's name.[78]

74 The draft test report records the start of flaming (also the flame spread up to 75 mm) for specimen 5 at the 6 min 26 s mark, and further flame spread through the 165 mm, 190 mm, 215 mm, 240 mm, and 265 mm vertical reference lines, through the 6 min 54 s mark, culminating in a maximum spread of flame of 290–375 mm at the 7 min 2 s mark.[79]

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75 DCS at para 146; NE 28 August 2025 at p 69 lines 1–21.

76 DSB at Tabs 1 and 2.

77 DSB at p 5.

78 DSB at pp 18–19.

79 DSB at p 18.

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75 The video,[80] however, does not show the flame spread ever reaching the 165 mm mark along the horizontal reference lines; flaming was high above the horizontal reference lines and did not cross the horizontal reference line at all (and Ye accepts that this is what the video shows).[81] From what is seen on the video, the test should have resulted in a Class '1' classification, but the conclusion stated in TUV SUD's draft test report is that the classification was Class '2', not Class '1'.

76 Both these videos show TUV SUD conducting BS 476 Pt 7 tests making observations based purely on when flame spread reaches the vertical reference lines, regardless of whether there is flaming at the horizontal reference line. However, what BS 476 Pt 7 requires, is flame spread at *the horizontal reference line* (see [58] and [63]–[64] above). Indeed, the video and draft test report of the "JTC Space" test shows that TUV SUD was prepared to conclude that an ACP was Class '2', and not Class '1', based on a test where there was no flaming at all at the horizontal reference lines, when that ACP should have been classified as Class '1'.

77 Ye (who testified in court) was involved in both the tests in question, but he was trained by TUV SUD's Mr Ong Kian Huat ("Ong"), another test operator who was conducting tests on the Alubond ACPs at the material time.[82] Ong's name also appears on the draft test report for the "JTC Space" test.[83]

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80 DSB at Tab 2.

81 NE 28 August 2025 at p 76 lines 5–17.

82 NE 28 August 2025 at p 77 lines 11 – 24.

83 DSB Tab 1 at p 19.

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Additionally, both Ye and Ong were copied on correspondence relating to the "JTC Space" test, the video, and the draft test report.[84]

78 In view of the above, I cannot accept the observations recorded in the TUV SUD test reports that RBC relied upon, or TUV SUD's stated conclusions that the ACPs it tested were not Class '1' under BS 476 Pt 1.

79 RBC advanced several reasons as to why I should accept the TUV SUD BS 476 Pt 7 tests as reliable, but I am not persuaded.

80 First, RBC relies on TUV SUD's fire lab having been accredited annually by the Singapore Accreditation Council ("SAC").[85] Ye said that involved checking "all the test procedure, equipment and all the – the competencies of the testing officer", and that there was "No finding, No comment" in relation to BS 476 Pts 6 & 7.[86] It is however not clear if the SAC audit extended to observing a BS 476 Pt 7 as conducted by TUV SUD, and comparing the observations recorded by TUV SUD with what was actually seen in the course of the test. In any event, even if TUV SUD had correctly conducted a BS 476 Pt 7 test when observed by TUV SUD, the videos showed that TUV SUD had incorrectly conducted the tests on the AVA Global and JTC Space ACPs. In the face of those videos, the fact of TUV SUD's SAC accreditation does not persuade me to accept TUV SUD's BS 476 Pt 7 tests as reliable.

81 Second, RBC's expert Associate Professor Aravind Babu Dasari ("Professor Dasari") said that he had seen how the video camera would be

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84 DSB Tab 1 at pp 5–9.

85 CCS at para 56.

86 NE 28 August 2026 at p 26 line 14 to p 28 line 21.

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positioned when he visited TUV SUD. He testified that "[t]he video camera is not directly in front of the testing place, so it's behind a glass wall and this is at an angle", and "these videos that are at an angle and the line of sight may also not be correct".[87] The fact remains that these are videos which TUV SUD itself took, to record the tests TUV SUD did. Moreover, when questioned, Ye did not say that the videos did not accurately reflect what had happened during the test because of their angle and line of sight; rather, he sought to blame the quality of the camera.[88]

82 Professor Dasari's reservations about the placement of the camera cannot explain why the TUV SUD test report and "JTC Space" draft test report for the videotaped tests match what is seen in the videos in terms of when the flame spread reaches the vertical reference lines, but without the flame spread reaching the horizontal reference lines at the same points in time, *and with the flaming at varying distances from the horizontal reference line*. If the placement of the camera were the cause of any divergence between what the videos show and what the TUV SUD operator actually observed, the videos would have shown a systematic error between what the videos show, and what the TUV SUD test reports record. But that is not what is seen in the videos. Moreover, the video of the JTC Space test shows that the flaming was *far from the horizontal reference line*.

83 Third, RBC says that Chip Soon's expert Professor James Fleming Lygate ("Professor Lygate"), when he was one of the fire experts in *Kalzip Asia Pte ltd v BFG International Ltd* [2018] SGHC 152, did not take any issue with

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87 NE 17 September 2025 at p 25 lines 8–25; NE 18 September 2025 at p 47 lines 7–11; see also CCS at para 55.

88 NE 28 August 2025 at p 58 lines 7–18 and p 59 line 24 to p 60 line 6.

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the way that TUV SUD had conducted BS 476 Pt 7 tests (including tests involving Ye).[89] Whatever position Chip Soon's expert may have taken in that other case, it in no way precludes Chip Soon in the present case from challenging the reliability of TUV SUD's BS 476 Pt 7 test *in this case*, particularly based on the *evidence in this case* including the videos. A related argument, which similarly fails, is that Chip Soon appears to have had the videos since 2017 or 2018, but did not use them to confront TUV SUD at that point in time.[90] That too does not preclude Chip Soon from doing so in the present case.

84 Finally, RBC relies on the High Court's decision in *Phua Chia Ping Benny v Public Prosecutor* (a decision in Case No. HC/MA 9194/2024/01) ("*Benny Phua's* Case"). That decision was handed down on 18 November 2025, after the conclusion of the evidence in the present case, and after the parties written closing submissions, but before the hearing of oral submissions on 27 November 2026. The parties put in further written submissions on 30 January 2026 to address the significance of *Benny Phua's* case.[91]

85 Mr Benny Phua Chia Ping ("Benny Phua") was Chip Soon's sales manager. He was charged with having deceived three companies into believing that there was a valid COC in force certifying that "Alubond USA" model ACPs had a Class '0' rating, when accepting those companies' orders for such ACPs, by dishonestly concealing the fact that that COC (No. 012566) had already been terminated on 5 April 2013 (see [7] above). The charge against Benny Phua did not concern the present Building, the present claimant RBC, or the COC

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89 CCS at para 56.

90 CCS at para 56.

91 see Claimant's Further Submissions dated 30 January 2026 ("CFS-1"); Defendant's Further Submissions dated 30 January 2026 ("DFS-1").

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covering the period of Chip Soon's supply of ACPs for the Building (which was a subsequent COC issued on 17 July 2013 which remained valid until 16 July 2016).

86 At first instance, the court held that Benny Phua: (a) knew that a valid COC was essential to the sale of ACPs for use as exterior cladding in Singapore; (b) was aware that COC No 012566 had been terminated; and (c) deliberately failed to inform the customers of that, and that the deception induced the customers to deliver property (namely money) to Chip Soon for the ACPs (*Public Prosecutor v Phua Chia Ping Benny* [2025] SGDC 13 ("*Benny Phua (DC)*") at [50]–[51], [53], [55] and [59]–[61]). Benny Phua was convicted accordingly.

87 It should be noted that whether the ACPs supplied to those customers were compliant or non-compliant with fire safety requirements was not relevant to Benny Phua's *conviction* on the cheating changes against him. It was sufficient that there was no valid COC covering the ACPs which Benny Phua sold to those customers, regardless of whether the APCs were compliant or not.

88 If, however, the APCs were non-compliant, that would be relevant to *sentence*. To that end, the first instance court accepted that the ACPs were non-compliant and (in relation to sentence) that "there was significant potential harm… [given the] public safety risks posed by installing non-compliant ACPs on external facades": *Benny Phua (DC)* at [69(b)].

89 In that regard, the TUV SUD tests in the *Benny Phua* case concerned *other buildings*: MCE ventilation buildings 1 and 2, VDL building at 259 Jalan Ahmad Ibrahim and Temasek Polytechnic West Wing. The court did not consider the TUV SUD tests on ACPs from the Building in the present case, nor

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the AVA Global or "JTC Space" TUV SUD tests (of which videos were adduced as evidence in the present case).

90 Benny Phua's magistrate's appeal to the High Court against conviction and sentence failed. In relation to sentence, the High Court accepted that the APCs *in that case* were non-compliant, and that "the Appellant's complaints about [TUV SUD's] purportedly poor and/or unreliable method of testing the ACP samples, are without merit. The samples taken failed the testing" (*Benny Phua's* Case at [34(d)]). RBC submits that I should give great weight to that finding as the tests conducted by TUV SUD in relation to ACPs from the Building in the present case were done at or around the same time as the test conducted by TUV SUD in relation to ACPS from the other buildings that were in issue in *Benny Phua*'s Case.

91 I do not agree:

(a) The High Court's decision in *Benny Phua's* case is a decision of a court of co-ordinate decision, that I am not bound by.

(b) The High Court in *Benny Phua's* case was sitting as an appellate court, and expressly recognised that "an appellate review is of a limited nature. Appellate courts will be slow to overturn a trial judge's findings of fact unless they are shown to be plainly wrong or against the weight of the evidence" (*Benny Phua*'s Case at [4]). Here, I am sitting as a trial judge.

(c) *Benny Phua's* case involves different buildings, a different COC, potentially different ACPs, and different tests, from the present case.

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(d) The evidence in the two cases is different – besides the preceding point, the videos of the AVA Global and JTC Space tests were not in evidence in *Benny Phua's* case.

92 With respect, the findings made by the first instance court and on appeal in *Benny Phua's* Case do not persuade me to find – on the evidence in *this* case – that the TUV SUD tests on ACPs taken from the Building are reliable, given what the videos of the AVA Global and "JTC Space" tests show.

Delamination and curvature of test specimens

93 Besides taking issue with TUV SUD's recording of observations from its BS 476 Pt 7 tests, Chip Soon also takes issue with the delamination of the ACPs for testing, including that the delamination process resulted in test specimens that were not "essentially flat" as required under BS 476 Pt 7.[92]

94 Chip Soon relies on paras 5.4.4 and 5.4.5 of International Standard ISO/IEC 17025:2017: General Requirements for the Competence of Testing and Calibration Laboratories ("ISO 17052").[93] Paragraph 5.4.4, on "Non-standard methods", provides as follows:[94]

> When it is necessary to use methods not covered by standard methos, these shall be subject to agreement with the customer and shall include a clear specification of the customer's requirements and the purpose of the test and/or calibration. *The method developed shall have been validated appropriately before use.*
>
> [emphasis added]

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92 DCS at paras 96–125.

93 DCS at paras 59 and 90.

94 1 CBOD 71.

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95 Paragraph 5.4.5, on "Validation of methods", provides as follows:[95]

> **5.4.5.1** Validation is the confirmation by examination and the provision of objective evidence that the particular requirements for a specific intended use are fulfilled.
>
> **5.4.5.2** The laboratory shall validate non-standard methods, laboratory-designed/developed methods, standard methods used outside their intended scope, and amplifications and modifications of standard methods to confirm that the methods are fit for the intended use. The validation shall be as extensive as is necessary to meet the needs of the given application or field of application. The laboratory shall record the results obtained, the procedure used for the validation, and a statement as to whether the method is fit for the intended use.

96 Chip Soon says that TUV SUD did not validate its method of delaminating ACPs to expose the LDPE core for testing.[96] That, however, does not mean that the TUV SUD's delamination method, or its BS 476 Pt 7 test results were thereby "invalid". TUV SUD's not validating its delamination method in accordance with ISO 17052 simply means that TUV SUD had not acted in accordance with ISO 17052. That does not necessarily affect the validity of TUV SUD's BS 476 Pt 7 tests. Whether those test results are valid, depends on the effect of TUV SUD's delamination method on test specimens, rather than on whether the delamination method was validated.

97 In this regard, RBC again relies on TUV SUD having been accredited by the Singapore Accreditation Council ("SAC"). RBC points out that SAC had no adverse comment about TUV SUD's delamination method.[97] The point is, however, not whether TUV SUD's delamination method was validated, or accredited, but whether TUV SUD's delamination method produced test

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95 1CBOD 71.

96 DCS at paras 96–103.

97 CCS para 51.

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specimens which would perform worse than fresh factory samples, or, indeed, test specimens obtained through another delamination method, such as Professor Lygate's warm delamination method. It does not appear that TUV SUD or SAC made any such comparison.

98 Neither the fire safety requirements nor BS 476 Pt 7 prescribed any method for delaminating an ACP for testing. Annex A of FSG 1:2008 introduced the requirement that the "core material of composite construction" be tested, but said nothing about how that core was to be exposed.

99 TUV SUD itself was prepared to accept for testing:

(a) a fresh factory sample for testing, where the core material was already exposed, or could easily be exposed;

(b) an ACP which had been delaminated by the person who submitted it for testing; or

(c) an ACP which TUV SUD itself delaminated by its delamination method.

100 However, the performance of test specimens could vary, depending on whether a fresh factory sample was used, or if the ACP had to be delaminated (and if so, how).

101 The evidence showed that if an ACP had to be delaminated, Chip Soon's expert, Professor Lygate, showed that test specimens delaminated using a warm

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delamination method would perform better than those delaminated using a cold delamination method (like TUV SUD's delamination method).[98]

102 Fresh factory samples (such as those used to obtain the 2013 COC) would perform even better than test specimens obtained by delaminating ACPs.[99] Fresh factory samples produced for the purposes of testing would only have adhesive applied on one face of the LDPE core. The aluminium skin on the other side of the core would then not be bonded by adhesive to the LDPE core, and could easily be removed to test the core. There would not be any adhesive on the tested face that might affect the test results, nor would the core be damaged by force being exerted in the delamination process. From tests done by Professor Lygate, any method of delamination would cause the performance of the resulting test specimens to be worse than that of fresh factory samples as:

(a) some adhesive would be left on the surface of the core;

(b) delamination would physically damage the core; and

(c) the delamination process would cause curvature of the test specimens.[100]

103 RBC's expert Professor Dasari says the presence of residual adhesive, if any, was not expected to affect the test results,[101] and that any cracking, fissures or holes caused by the delamination process would not render a test specimen unsuitable for testing, so long as the requirements of clause 4.1.1 of BS 476 Pt 7

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98 DCS at paras 104–111.

99 DCS paras 37–38.

100 DCS paras 104–121; Bundle of affidavits of evidence-in-chief dated 29 July 2025 ("BAEIC") vol 5 at pp 39–40, 59, 73, 97 and 162 (paras 102–103, 180, 234 358(c)).

101 CCS para 49; 2 BAEIC 61 (paras 11.13–11.14).

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were still met,[102] *ie*, "any cracks, fissures or holes do not exceed 6.5 mm in width or a depth of 10 mm, and the total area of such cracks, fissures or holes at the surface does not exceed 30% of a representative square area of 270 mm x 270 mm of the exposed surface".[103]

104 I accept Professor Lygate's opinion, based on the tests he did, that in terms of adhesive being left on the surface of the core (after delamination), and the core being physically damaged as a result of delamination, a delaminated test specimen would not perform as well as a fresh factory sample would, in a BS 476 Pt 7 test. It is not merely a question of whether the delaminated test specimen would still meet the requirements of BS 476 Pt 7, but *relative* performance of a delaminated test specimen as compared to a fresh factory sample.

105 To recap, the fire safety requirements require ACPs used for external cladding to have a Class '1' surface spread of flame if tested in accordance with BS 476 Pt 7. If fresh factory samples of such an ACP were submitted for testing and a Class '1' classification were obtained, that ACP would meet fire safety requirements, even if delaminated test specimens of the same ACP might not have achieved the same classification. The fire safety requirements do not mandate the use of only delaminated test specimens, and not fresh factory samples, and indeed TUV SUD issued the 2013 COC after testing fresh factory samples. Likewise, if test specimens obtained using Dr Lygate's warm delamination method achieve Class '1' classification, the ACPs would meet fire safety requirements, even if cold delaminated test specimens of the same ACPs might not have achieved the same classification.

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102 2 BAEIC 60–61 (paras 11.9).

103 3 CBOD 1104.

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106 Put another way, if cold delaminated test specimens (such as those obtained by TUV SUD using its delamination method) were subjected to BS 476 Pt 7 testing and did not achieve Class '1' classification, in order to determine if the ACPs were non-compliant with fire safety requirements, one would have to consider if fresh factory samples, or warm delaminated test specimens, of the same ACP would likewise have failed to achieve Class '1' certification.

107 Thus, even if the test results of TUV SUD's BS 476 Pt 7 tests which RBC relied upon were valid (which I do not accept), can one conclude from them that fresh factory samples, or warm delaminated test specimens would also have not achieved Class '1' classification? For the reasons given by Professor Lygate, one cannot reach that conclusion.

108 There is then the issue of curvature of the test specimens because of the delamination process.

109 As BS 476 Pt 7 states in cl 1 (see [57] above), the test method specified "provides data suitable for comparing the end-use performances of *essentially flat* materials, composites or assemblies".[104] Clause 4, on "[s]uitability of a product for testing", provides in cl 4.1.1(a): "A product shall have one of the following characteristics to be suitable for evaluation: a) an essentially flat exposed surface".[105] Clause 3.5 defines "essentially flat surface" as "[s]urface from which specimens can be obtained that have an irregularity from a flat plane which is less than ±3 mm".[106]

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104 3 CBOD 1103.

105 3 CBOD 1104.

106 3 CBOD 1103.

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110 As noted above, the delamination process causes test specimens to curve, due to the force applied to the ACP to delaminate it. TUV SUD did not however measure the test specimens to see if they were "essentially flat" as required by BS 476 Pt 7. Instead, it appears that TUV SUD's operators considered that they could determine whether a test specimen was suitable for testing, simply by looking it.[107] In this regard, Ye asserts that the curved panel seen in a video of Professor Lygate replicating TUV SUD's delamination method was "essentially flat" as defined under BS 476 Pt 1 and thus suitable for testing.[108] However, Professor Lygate measured the distance between the peak of the curved panel and a flat plane, and it was 13 mm, beyond the tolerance of ±3 mm allowed under BS 476 Pt 7.[109] On the terms of BS 476 Pt 7, that was not an "essentially flat" surface as defined in cl 3.5, and pursuant to cl 4.1.1(a) it was not suitable for testing. In similar vein, Ye says that he "eyeballed" the delaminated samples tested by TUV SUD, but no measurements were taken, to confirm that the samples were essentially flat.[110]

111 Further, Ye says that TUV SUD would flatten test specimens so that they could slide into the specimen holder.[111] In this regard, cl 4.1.3 of BS 476 Pt 7 provides as follows:[112]

> When an exposed surface does not conform to the requirements of 4.1.1, it shall be modified to conform to the requirement of 4.1.1a, and this shall be stated in the report. A prefix D shall be added to the spread of flame classification of any product

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107 NE 3 September 2025 at p 21 lines 24 p 22 line 7.

108 NE 3 September 2025 at p 21 lines 2–23.

109 6 BAEIC 325.

110 NE 3 September 2025 at p 21 line 24 to p 22 line 7.

111 NE 3 September 2025 at p 23 lines 1–6

112 3 CBOD 1104.

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> which has been tested in a modified form, in accordance with 11.4.

112 Clause 4.1.3 allows modification of an exposed surface which does not conform to cl 4.1.1 (*eg*, because it is not "essentially flat"), but such modification is to be stated in the test report, and TUV SUD did not do so; nor did TUV SUD add "prefix D" to the spread of flame classification to denote that the product had been tested in a modified form, as required by cll 4.1.3 and 11.4.

113 In any event, as TUV SUD only relied on visual observation of its operators (which was unreliable as Ye's evidence about Professor Lygate's curved sample shows), there is no assurance that the test specimens TUV SUD tested after delamination were "essentially flat" such that they complied with cl 4.1.1(a) even after being modified by flattening the test specimens.

114 Professor Lygate's opinion, which I accept, is that flattening test specimens after delamination may induce cracks within the core which would increase the surface area of the specimen, making ignition more likely and having a negative effect on the test outcome.[113]

115 The curvature of the test specimens after delamination (and TUV SUD flattening them thereafter) reinforces my conclusion that TUV SUD's BS 476 Pt 7 test reports, which RBC relies on, are unreliable. One cannot conclude from those test reports that the ACPs which were installed as external cladding at the Building were not Class '1' as required by BS 476 Pt 7, and thus were non-compliant with fire safety requirements.

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[113] 5 BAEIC 43 (para 116).

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Other evidence

116 Following from my finding above that one cannot conclude from the BS 476: Part 7 tests conducted by TUV SUD on ACPs taken from the Building, that those ACPs were non-compliant, the question is whether the other evidence in the case nevertheless supports that conclusion. The parties put in further written submissions on 3 July 2026 to address that scenario.[114]

117 RBC relies on the following, in particular:

(a) the observations and investigative findings of the SCDF as set out in its investigation report dated 14 August 2017, and the evidence of the SCDF witnesses called by the claimant;

(b) findings by Professor Dasari and Professor Tan Kang Hai ("Professor Tan");

(c) statements made by Mr Lim Kok Keng ("Kesmond Lim") and Benny Phua, and that Chip Soon did not call them as witnesses;

(d) part of the stock of Alubond ACPs supplied for the Building allegedly came from Chip Soon's warehouse sale, comprising of older stock manufactured before the issuance of the 2013 COC;

(e) Chip Soon's failure to produce the test results of the Alubond ACPs tested by Eurocon Building Industries F.Z.E ("Eurocon") (if there were such tests); and

(f) Chip Soon's allegedly "lax working systems" at its warehouse.[115]

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114 CFS(2), DFS(2).

115 Claimant's Second Further Submissions dated 3 July 2026 ("CFS-2") at paras 8–33.

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118 Chip Soon, on the other hand, contends that a consideration of all the evidence would still not support a conclusion that the ACPs supplied for the Building were non-compliant.[116]

SCDF's findings vs the 2013 COC test data

119 RBC says that even without relying on TUV SUD's BS 476 Pt 7 tests, the court can and should conclude that the ACPs installed at the Building would not have been Class '1' if tested for surface spread of flame in accordance with BS 476 Pt 7. RBC says this can be inferred from:

(a) the fire having spread quickly up the façade;

(b) the cladding itself burning and/or melting;

(c) the ACPs performing differently from those tested for the 2013 COC; and

(d) the August 2017 TUV SUD materials analysis report 7191165640-FAC17-ZJ/LXB/ZY/CLH showing that the core composition of used ACPs was different from that of new factory samples.[117]

120 RBC relies on the findings of the SCDF as set out in its 14 August 2017 fire investigation report,[118] including that:[119]

> The cladding, after being subjected to the incipient fire for approximately 4 minutes, was ignited and the fire could spread

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116 Defendant's Second Further Submissions dated 3 July 2026 ("DFS-2") at paras 8–18.

117 CFS-2 at paras 9–14; CCS at paras 43–44.

118 6 CBOD 2686–2739.

119 CFS-2 at para 9; 6 CBOD 2695b (para 8(c)).

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> swiftly up the façade, near Staircase A, as the whole vertical stretch was covered with combustible cladding. The vertical fire spread is also fast as fire burns most efficiently upwards.

However, SCDF did not observe the spread of the fire. It relied on footage from a closed-circuit television ("CCTV") camera from an opposite building capturing a 'glow' which "persisted for about 4 minutes after which flames were clearly visible to be spreading up the façade".

121 When cross-examined, LTC Muhammad Faizal Bin Mazlan ("LTC Faizal") of the SCDF agreed that based on the CCTV footage one could not conclude that "the flames were racing up, or swiftly"; it was possible that the flame was steadily creeping upwards instead.[120] There was a huge tree blocking a view of the fire, as seen on the CCTV footage.[121] The SCDF also recorded a statement from an eyewitness who saw the fire from the neighbouring building, but his vantage point had the same issue of a blocked view, as did the CCTV; and LTC Faizal agreed that even having regard to what the eyewitness said, it was possible for the flames to have crept up the wall rather than suddenly shooting up the wall.[122]

122 Moreover, the spread of the fire would have been contributed to by:

(a) the lack of cavity barriers in the concealed space between the ACPs and the reinforced concrete wall, which resulted in a "chimney effect" or "stack effect" contributing to a vertical spread of flame upwards; and

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120 NE 21 August 2025 at pp 97–105 (particularly at p 99 line 20 to p 100 line 2, and p 105 lines 17–20).

121 NE 21 August 2025 at p 98 line 20 to p 99 line 8.

122 NE 21 August 2025 at p 99 line 9 to p 105 line 19.

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(b) the use of cassettes in the installation of the ACPs – the cassettes were made by gouging channels in the face of the ACPs so that right angles could be formed, but this exposed the core of the ACPs such that they would ignite more easily as compared to ACPs in their original flat panel state.[123]

123 From the CCTV footage and the eyewitness report of the fire, and bearing in mind the lack of cavity barriers and the use of cassettes, one cannot conclude, on the balance of probabilities, that the ACPs in question would not be Class '1' if tested under BS 476 Pt 7.

Findings by Professor Dasari and Professor Tan Kang Hai

124 RBC's expert Professor Dasari and Professor Tan were commissioned to design a fire test involving ACPs of different fire class ratings. They were provided with ACPs from the Building and another source known as "EXP" (which were also Alubond ACPs).[124]

125 However, Professor Dasari and Professor Tan did not do any BS 476 Pt 7 tests. Their fire tests used ACPs where the aluminium skin had not been removed (unlike the BS 476 Pt 7 tests done by TUV SUD), and did not involve cassettes (which had been used at the Building).[125]

126 RBC submits that Professor Dasari concluded from the fire tests that the panels tested were of different classes, citing para 11 of Professor Dasari's

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123 5 BAEIC 78–79; DCS at paras 175–176, 243–247.

124 NE 26 August 2025 at p 36 lines 2–7.

125 see also DCS at paras 172 and 175; NE 17 September 2025 at p 18 line 23 to p 19 line 2; 5 BAEIC 72 (paras 235–236).

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report.[126] That paragraph, however, was a "summary of findings based on *test reports* and fire tests" [emphasis added]. Professor Dasari's opinion was based on TUV SUD's BS 476 Pt 7 tests, as well as the fire tests, and he did not say that based on the fire tests alone he could conclude that the ACPs from the Building would not be Class '1' if tested under BS 476 Pt 7.

127 Professor Dasari did also mention a correlation between TUV SUD's BS 476 Pt 7 tests and the behaviour of the ACPs in the fire tests,[127] but that too stops short of being an opinion that based on the fire tests alone he could conclude that the ACPs from the Building would not be Class '1' if tested under BS 476 Pt 7. Notably, in RBC's closing submissions it did not go further than to submit that the outcome of the fire tests "corroborate the results" of the TUV SUD tests, and not that one can conclude from the fire tests themselves that the ACPs from the Building were not Class '1' under BS 476 Pt 7.[128]

128 One cannot conclude from the fire tests done by Professor Dasari and Professor Tan that the ACPs supplied to the Building were not Class '1' under BS 476 Pt 7.

Statements made by Kesmond Lim and Benny Phua, and Chip Soon's not calling them as witnesses

129 Kesmond Lim and Benny Phua of Chip Soon were not called as witnesses. Instead, Chip Soon called Mr Phua Jiasen, Melvin ("Melvin Phua") (Benny Phua's brother). Melvin Phua was Chip Soon's general manager,[129]

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126 7 CBOD 3065 (para 11); CFS-2 at para 15.

127 CCS at paras 61–62; NE 17 September 2025 at p 18 lines 9–22.

128 CCS at para 62.

129 1 BAEIC 35.

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Benny Phua was Chip Soon's sales manager, and Kesmond was a former employee who had assisted Benny Phua in the sale of ACPs.[130] Melvin Phua was in charge of logistics such as handling the stocks of ACPs and samples, and the provision of samples for testing.[131]

130 Melvin Phua said that Chip Soon had earlier intended to call both he and Benny Phua as witnesses; however, by the time of the present trial Benny Phua had been convicted (and his appeal against that was pending). Melvin Phua explained that this caused Benny Phua to suffer from depression and to entertain suicidal thoughts, and he was "no longer the same person as he was before".[132] In those circumstances, Chip Soon did not proceed to call Benny Phua as a witness.

131 It remained open nevertheless to RBC to have subpoenaed Benny Phua as a witness, but RBC did not do so. Instead, it asked the court to draw an adverse inference against Chip Soon for not calling Benny Phua as a witness, and RBC also sought to rely on Benny Phua's statements from the criminal proceedings as evidence in this case (which Chip Soon agreed to).[133]

132 Given Melvin Phua's and Benny Phua's respective roles in the company, Benny Phua's situation, and Chip Soon's willingness to allow Benny Phua's statements to be admitted as evidence, I do not draw an adverse inference against Chip Soon for not calling Benny Phua as a witness. Besides the matters mentioned above, as Benny Phua's appeal was still pending, it is quite

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130 NE 26 August 2025 at p 31 lines 17–24; NE 9 September 2025 at p 42 lines 4–6 line 22 to p 142 line 1.

131 NE 9 September 2025 at p 18 line 25 to p 19 line 3.

132 NE 10 September 2025 at p 80 lines 11–18.

133 CCS at para 20.

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understandable that he might not have wished to testify (or Chip Soon did not wish to call him as a witness) as that might have prejudiced his position in the pending appeal.

133 As for Kesmond Lim, it was explained that he was no longer in Singapore and did not agree to give evidence on behalf of Chip Soon.[134] It was open to RBC to have called him as a witness (if RBC were able to secure his attendance), but RBC did not do so. In the circumstances, I do not draw an adverse inference against Chip Soon for not calling him as a witness.

134 RBC belatedly (at the time of closing submissions) indicated that it wished to admit Kesmond Lim's statements to the police into evidence. This was resisted by Chip Soon, and the parties filed submissions on this on 30 January 2026.[135]

135 Chip Soon submits that RBC failed to file a Notice to Admit Documentary Hearsay Evidence, as required by s 32 of the Evidence Act 1893 (2020 Rev Ed) ("Evidence Act") for Kesmond Lim's statements to be admitted into evidence under that section, and in any case that s 32(1)(c) of the Evidence Act is inapplicable.[136]

136 RBC's response is that the statements may be admitted under s 45A of the Evidence Act, which does not prescribe any notice requirement.[137]

137 Section 45A of the Evidence Act provides:

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134 NE 10 September 2025 at p 85 lines 12–19.

135 see CFS-1 at paras 1–7; DFS-1 at paras 3–22.

136 DFS-1 at paras 3–20.

137 CFS-1 at paras 1–3.

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> **Relevance of convictions and acquittals**
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> **45A.**—(1) Without affecting sections 42, 43, 44 and 45, the fact that a person has been convicted or acquitted of an offence by or before any court in Singapore is admissible in evidence for the purpose of proving, *where relevant* to any issue in the proceedings, that the person committed (or, as the case may be, did not commit) that offence, whether or not the person is a party to the proceedings; and where the person was convicted, whether the person was so convicted upon a plea of guilty or otherwise.
>
> …
>
> (5) *Where relevant*, any document containing details of the information, complaint, charge, agreed statement of facts or record of proceedings on which the person in question is convicted is admissible in evidence.
>
> [emphasis added]

138 I agree with Chip Soon that Benny Phua's conviction is not relevant to the issues in the present case.[138] Benny Phua was convicted on cheating charges for having sold ACPs for use at other buildings (not the Building in question in the present case) without a valid COC, *ie*, prior to the 2013 COC being obtained. Moreover, whether the ACPs which Benny Phua sold were or were not compliant with fire safety requirements, was not an element of the charges against him. What mattered was that the ACPs were sold without a valid COC, whether or not they were compliant with fire safety requirements.

139 It follows from Benny Phua's conviction not being relevant, that s 45A of the Evidence Act does not open the door to the statements (like Kesmond Lim's statements), that formed part of the record of proceedings, to be admitted in this case. Section 45A(5) expressly recognises that the admission of such documents is only "[w]here relevant", and that is premised on the fact of the conviction being relevant under s 45A(1) to begin with.

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138 DFS-1 at paras 7–9.

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140 Turning to s 32 of the Evidence Act, I agree with Chip Soon that the court should not waive the requirement of giving notice to admit Kesmond Lim's statements as hearsay under that section.[139] Had such notice been given in the course of the trial, Chip Soon may well have led evidence to contradict what was said in those statements.

141 If, however, the notice requirement were surmounted, I agree with RBC that Kesmond Lim's statements would satisfy s 32(1)(*c*) of the Evidence Act, as a statement against the interest of its maker. Chip Soon cites *Velstra Pte Ltd v Dexis Bank NV* [2005] 1 SLR(R) 154 at [40] for the proposition that for a hearsay statement to be admissible under the "against interest" rule, it must be shown that the person who made it was conscious that what he said was against his own interest and/or that he realised that he was opening himself up to criminal prosecution or civil liabilities.[140]

142 In the present case, the gist of Kesmond Lim's statements that RBC wishes to rely on was that he had reservations about the consistency and quality of the Eurocon ACPs as they kept failing fire tests.[141] I consider that would satisfy the "against interest" rule.

143 Out of the abundance of caution, I consider both Benny Phua's statements (which had been admitted without objection) and Kesmond Lim's statements, while bearing in mind that neither of them testified in these proceedings.

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139 DFS-1 at paras 13–16.

140 DFS-1 at paras 19–20.

141 CFS-2 at para 17.

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144 RBC cites para 31 of Kesmond Lim's conditioned statement where he says:[142]

> I remember discussing with Benny about our reservations about the consistency and quality of the Eurocon ACPs as they kept failing the fire tests. The experience of doubting Eurocon and worrying about product quality took a toll on me. I recall telling Benny that if Eurocon continued to be a difficult party to work with and was consistently giving us reason to doubt about the quality of their product, Chip Soon might be better off ceasing sales of Alubond ACPs.

145 RBC also relies on Benny Phua and Kesmond Lim saying that the FR (430) and FR (630) ACPs (which the 2011 COC was in respect of) were the same as the FR B1 and FR B2 ACPs (FR B1 being the type of ACP for which the 2013 COC was in respect of).[143] RBC contends that FR (430) was the same as FR B1, and FR (630) was the same as FR B2. There is, however, a 15 August 2017 letter from Eurocon (after the fire) that inverts the order: "This is to declare that Alubond U.S.A. FR 430 and FR 630 products are classified as FR B2 and FR B1 respectively in accordance with BS 476 Part 6 and Part 7".[144]

146 The evidence nevertheless indicates that the 2013 COC (which was in respect of FR B1 ACPs that Chip Soon purportedly supplied to the Building) involved an ACP that was the same as, or similar to, one type of ACP that was the subject of the 2011 COC, for which surveillance tests had failed, resulting in the 2011 COC being terminated. That is the context of the reservations which Kesmond Lim had expressed.

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142 Claimant's Bundle of Documents dated 7 August 2025 ("CB") at p 137 (para 31).

143 CCS at paras 10–11; CB at p 38 (para 50);

144 6 CBOD 2740.

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147 This was the foundation for RBC's submission in its closing submissions that:[145]

> After failing not one but multiple BS 476 Pt 6 and 7 tests between the issuance of the 2011 OCC and the 2013 COC, the Claimant submits that any reasonable and prudent ACP distributor ought to have known that (i) there was something amiss with Alubond ACPs; (ii) there were inconsistencies in the core material of Alubond ACPs; and (iii) the core of the manufactured/production sample Alubond ACPs were not of uniform standard. The Claimant also subm8its that the Defendant did in fact known that (i) there was something amiss with Alubond ACPs; (ii) there were inconsistencies in the core material of Alubond ACPs; and (iii0 the core of the manufactured/production sample Alubond ACPs were not of uniform standard.

148 This is a submission that, based on what Benny Phua and Kesmond Lim knew, and the reservations which Kesmond Lim says they had about the consistency and quality of the Eurocon ACPs, Chip Soon was negligent in supplying such ACPs for the Building, although they had the 2013 COC which ostensibly covered that. RBC did not then suggest that from what Benny Phua and Kesmond Lim had said, it could be inferred that the ACPs supplied for the Building were not Class '1' when tested under BS 476 Pt 7. Indeed, the premise of the 2013 COC was that FR B1 ACPs were Class '1' when tested under BS 476 Pt 7. Moreover, the criminal proceedings against Benny Phua, and the statements by Benny Phua and Kesmond Lim related to the 2011 COC rather than the 2013 COC.

149 Further, Melvin Phua explained that it appeared that the failure of the BS 476 Pt 7 surveillance tests between the 2011 COC and the 2013 COC was due to reasons other than the quality of the ACPs.

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145 CCS at para 13.

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150 Regarding the 17 October 2012 surveillance test, Melvin Phua said that internal investigations by him revealed that one of Chip Soon's workers had sent a sample of a different ACP for testing (which Eurocon had provided for testing with a view to obtaining a new COC), instead of using an Alubond FR (430) ACP panel in the warehouse and cutting it to size and delaminating it, before submitting that for testing.[146] Thus, Melvin Phua told Kesmond Lim to inform TUV SUD that Chip Soon had sent in the "wrong fire-rated core"; Chip Soon sent a letter to TUV SUD (signed by Benny Phua) stating:[147]

> Our manufacturer for Alubond U.S.A aluminium composite panel, Eurocon Building Industries FZC, had confirmed that they had sent us the wrong fire-rated core – Alubond Fr (430) for the previous surveillance test of BS 476-7:1997 due to the various type of Fr core they supply worldwide.
>
> ……
>
> Meanwhile our manufacturer had already sent us the correct core – Alubond Fr (430) for the re-test and is ready for submission.

151 Regarding the 28 February 2013 surveillance re-test, Melvin Phua said that he had delaminated the ACPs used for that test. He did so by using a pair of pliers, and also used a knife to make score/cut marks to assist with the delamination. After delamination, the panels were bent out of shape due to the force that had to be used, and the surface of the exposed core was not smooth and had visible deep scuff marks.[148]

152 Melvin Phua acknowledged that he did have a concern when he heard that the ACPs had failed the re-test, so he asked one Mr Rao ("Rao") of Eurocon about the failure; Rao told him that his delamination of the ACPs would have

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146 1 BAEIC 45 (para 25).

147 1 BAEIC 45 (para 26); 1 CBOD 342.

148 1 BAEIC 46–47 (para 29); NE 9 September 2025 at p 56 line 9 to p 57 line 7.

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affected the result.[149] I accept Melvin Phua's evidence as to what had happened in relation to the BC 476 Pt 7 surveillance test and re-test following the 2011 COC.

153 In the circumstances, any reservations about consistency and quality which Kesmond Lim, Benny Phua, or Melvin Phua may have had, are insufficient to support a conclusion that FR B1 ACPs, for which the 2013 COC had been issued, were not Class '1' under BS 476 Pt 6. This is particularly so given that those reservations would have stemmed from the TUV SUD tests between the 2011 COC and the 2013 COC. I regard TUV SUD's BS 476 Pt 7 tests in that period to be unreliable, just as those conducted by TUV SUD after the fire on ACPs taken from the Building.

154 For completeness, RBC also seeks to rely on the statements of one Mr Phang Lim Chan ("Phang") from TUV SUD, who was not called as a witness. For the same reasons discussed above in relation to Kesmond Lim's statements, Phang's statements are not admissible under s 45A simply because they formed part of the record in Benny Phua's criminal proceedings. As with Kesmond Lim statements, RBC did not give notice to admit Phang's statements under s 32 of the Evidence Act, and I would not waive that requirement.

155 Unlike Kesmond Lim's statements, however, Phang's statements are not "against interest", and so even if the notice requirement were surmounted, they would not be admissible under s 32(1)(c) of the Evidence Act.

156 RBC sought to rely on Phang's statements to prove that the samples used for the 2013 surveillance re-test already had one aluminium skin removed by

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149 NE 9 September 2025 at p 71 line 6 to p 72 line 11.

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the factory, and so Melvin Phua's evidence that he had removed the aluminium skin should not be believed.[150] If RBC wanted to prove that the samples in question which Phang used had the aluminium skin already removed by the factory, RBC should have called Phang as a witness. Moreover, if Phang only saw the ACPs in delaminated form, he might not know whether the ACPs has been delaminated by Eurocon or by Chip Soon.

157 In any event, this point adds nothing to RBC's case, given that I regard the BS 476 Pt 7 surveillance re-test done by TUV SUD to be unreliable.

Part of the stock of Alubond ACPs supplied for the Building allegedly came from Chip Soon's warehouse sale

158 RBC contends that I should infer that at least *some* of the ACPs supplied for the Building were non-compliant with fire safety requirements, because part of the stock of the ACPs came from Chip Soon's warehouse sale on 28 December 2013, which included:

(a) old stock that Chip Soon had before the issuance of the 2013 COC; and

(b) FR B2 ACPs which were not suitable for use as external cladding.[151]

159 As to whether some of the ACPs supplied for the Building were old stock, Melvin Phua agreed that the 17 January 2014 supply of ALM-121 Raw Grey ACPs for the Building came from stock that Chip Soon had at the time of

150 CCS at paras 16–18, CFS-1 at paras 3–4.

151 CFS-2 at paras 19–20.

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its 28 December 2013 warehouse sale.[152] The orders that Chip Soon had placed with Eurocon for the Building had not included ALM-121 Raw Grey ACPs, but Chip Soon's warehouse sale had offered such ACPs for sale.[153] To the extent that ACPs for the Building had come from existing stock rather than new orders placed with Eurocon, those would not have been covered by the 2013 COC; instead they would previously been covered by the 2011 COC, but that had been terminated on 4 April 2013 (prior to the warehouse sale on 28 December 2013 and prior to the supply on 17 January 2014).

160 Benny Phua's conviction vividly illustrates the serious consequences of the sale and supply of ACPs not covered by a valid COC, but it still begs the question whether one can infer from that, that the ACPs thus sold and/or supplied were non-compliant with fire safety requirements, and in particular that they were not Class '1' under BS 476 Pt 7.

161 The issuance of the 2011 COC indicates that FR (430) ACPs were Class '1' under BS 476 Pt 7. However, the ACPs tested in the BS 476 Pt 7 surveillance tests 17 October 2012 and 28 February 2013 failed the tests, and the 2011 COC was terminated on 4 April 2013. As stated above, I regard the surveillance tests to be unreliable, and so cannot conclude from them that ACP FR (430) was indeed non-compliant with fire safety requirements. Thus, the mere fact that some of the ACPs supplied for the Building may have been FR (430) ACPs from old stock rather than FR B1 ACPs from new orders, does not support a conclusion that the ACPs supplied for the Building were not Class '1' under BS 476 Pt 7.

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152 NE 9 September 2025 at p 139 line 2 to p 143 line 19.

153 NE 9 September 2025 at p 118 line 17 to p 120 line 17 and p 142 line 2 to p 143 line 19.

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162 The second aspect of RBC's allegation is that some FR B2 panels (unsuitable for use as external cladding) may have been mixed up with FR B1 panels, such that the ACPs supplied to the Building may have included both FR B1 and FR B2 panels. Thus, even if the FR B1 panels were compliant with fire safety requirements, the FR B2 panels were not.

163 RBC cites Benny Phua's statement about him having had FR B2 stocks in various colours (which he said were, "the more common colours that customers would look out for")[154], which corresponded with the colours of the Alubond ACPs offered for sale in Chip Soon's warehouse sale. RBC suggested that one could conclude there were FR B2 ACPs in Chip Soon's warehouse sale, and further that ACPs supplied for the Building would have included FR B2 ACPs.[155] I do not accept this submission. Just because the FR B2 colours that Benny Phua mentioned are the same as the ACP colours offered for sale in the Chip Soon's warehouse sale, does not mean that FR B2 ACPs were offered for sale in that warehouse sale, rather than FR B1 ACPs with those colours, let alone that FR B2 ACPs were supplied to the Building when FR B1 ACPs ought to have been. Benny Phua did not concede in the criminal proceedings that Chip Soon had ever supplied FR B2 ACPs in place of FR B1 ACPs. Indeed, he disputed whether the ACPs which had been sold without a valid COC (that were the subject of the criminal proceedings) were non-compliant. As noted above, in relation to sentencing that point was decided against Benny Phua – but on the basis that the ACPs had failed tests done by TUV SUD, not on the basis that FR B2 ACPs had been supplied in place of FR B1 ones, and not on the basis that there was no valid COC covering the sale/supply.

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154 CB at p 26 (para 10).

155 CFS-2 at para 20.

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164 RBC also says that because Chip Soon had imported some FR B2 panels and some FR B1 panels without back-prints (which could be used to distinguish between FR B2 panels from FR B1 panels), the ACPs supplied for the Building would have included ACPs without back-print "which could have been either FR B1 or FR B2 Alubond ACPs".[156] There is, however, no evidence that any ACPs supplied for the Building had no back-prints, let alone that if that were the case FR B2 ACPs were included. I cannot conclude that any ACPs supplied for the Building were FR B2 ACPs.

Chip Soon's alleged failure to produce the test results of the Alubond ACPs tested by Eurocon (if there were such tests)

165 RBC says an adverse inference should be drawn against Chip Soon for its failure to produce the results of tests conducted by Eurocon on ACPs from the Building after the fire (if there were such tests), and that the court should infer that those test results would have shown that the ACPs supplied to the Building were non-compliant.[157]

166 Melvin Phua acknowledged that, from contemporaneous correspondence and discussions, Eurocon (after the fire) had taken away some panels from the Building overseas for testing. However, he did not know if Eurocon had in fact done tests, and if so, what the test results were. He added that there was some consideration of doing non-BS tests (because Eurocon considered that ACPs should not be delaminated for testing) but such tests results would not be accepted by the authorities.[158]

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156 CCS para 80.

157 CFS-2 at paras 21–25.

158 NE 10 September 2025 at p 8 lines 1–7.

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167 I do not agree with RBC that I should infer that Eurocon had tested the panels, and further that those test results would show that the ACPs were non-compliant.

168 Eurocon is a foreign company, and as such Chip Soon could not compel it to provide testimony or produce documents. It also appears that the tests (if they were done) were done overseas. It is not apparent if any tests were done, and if so, what their results were. As Melvin Phua explained, any tests done by Eurocon would not have been BS 476 Pt 7 tests done on delaminated ACPs (which could then be used in place of the TUV SUD tests).[159] Had Eurocon done such tests on delaminated ACPs (peeling off one aluminium skin), the same issues with delamination (discussed above at [102]–[106]) would have affected the test results. Moreover, it was open for RBC to have sought to obtain the test results (if any) for use in these proceedings.

169 I do not draw an adverse inference against Chip Soon for not obtaining from Eurocon the test results (if there were any), and producing them in these proceedings. I cannot conclude from the lack of those test results, that they would have shown that the ACPs were non-compliant.

Chip Soon's allegedly lax working systems at its warehouse

170 RBC says it can be inferred from Chip Soon's work systems being lax and careless, that the ACPs supplied for the Building were not in fact FR B1 APCs that were compliant with fire safety requirements.[160]

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159 NE 10 September 2025 at p 44 line 3 to p 47 line 3.

160 CFS-2 at paras 28–33; CCS at paras 75–76.

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171 RBC relies on SPF's 24 August 2017 News Release ("News Release") which stated:[161]

> Based on the latest Police investigations, it appears that:
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> ……
>
> b) Stocks of both Alubond models FRB1 and FRB2 were mixed together at the warehouse of the local distributor. These panels from the mixed stock in the warehouse were supplied to 40 buildings, for use as cladding on the external walls of these buildings.
>
> c) Tests showed that the external walls of some of the 40 buildings contain a mixture of Alubond models FRB1 and FRB2…

172 SPF's DSP Toh Mei Sze, Violet, however, told the court that she could not provide any details of the basis for the conclusions reached by SPF from its investigations.[162] In the circumstances, the SPF News Release is merely an out-of-court statement that no SPF representative gave any substantive evidence about in court. It is either inadmissible hearsay or, if admissible at all, of no weight.

173 Further, one cannot conclude from the statement in the News Release that "[t]ests showed that the external walls of *some* of the 40 buildings contain a mixture of Alubond models FRB1 and FRB2" [emphasis added] that the external walls of *this* Building had a mix of FRB1 and FRB2 panels. Moreover, SPF's reference to "Tests" would have been a reference to (or would include) the TUV SUD tests that I have found to be unreliable.

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161 6 CBOD 2753.

162 26 August 2025 at p 19 line 24 to p 20 line 10.

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174 Melvin Phua denied that FR B1 and FR B2 ACPs had been mixed at Chip Soon's warehouse such that some FR B2 ACPs may have been supplied in place of FR B1 ones.[163] Nor was this admitted to by Benny Phua.

175 RBC relies on Benny Phua's 3rd Redacted Statement that "there were times that due to unforeseen circumstances, B2 panels were mixed with B1 panels".[164] However, Benny Phua also said, "…I did not stop selling FR B2 panels; to the best of my ability and knowledge, I only supplied them to walkway or linkway projects".[165]

176 As noted above at [164], there is no evidence that any FR B2 ACPs were supplied for the Building, when FR B1 ones should have been instead.

177 RBC criticises Chip Soon for not producing any documents pertaining to inventory stock lists, inventory records, or stock records.[166] RBC asks that I draw an adverse inference that either Chip Soon never kept such records at all, or that such records were bad for Chip Soon.

178 Melvin Phua, however, explained that Chip Soon's only kept such records for 3–6 years, and its inventory system could not track back to the inventory and/or stock list for 2014 or earlier.[167] Any such records in Chip Soon's possession at the time of the police investigations would have been taken by the police.[168]

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163 1 BAEIC 62 (para 72).

164 CCS at para 75; CB Tab 12 at pp 78–79 (para 12.1).

165 CB Tab 6 at p 35 (para 43).

166 CCS at para 31.

167 DCS at para 222; NE 9 September 2025 at p 165 lines 18–23.

168 NE 9 September 2025 at p 174 lines 9–19.

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179 I accept Melvin Phua's evidence on this, and do not draw an inference that Chip Soon kept no inventory stock lists, inventory records, or stock records, or that such records were bad for Chip Soon.

180 The burden remains on RBC to prove that Chip Soon supplied non-compliant ACPs for the Building. RBC's complaints about Chip Soon's record keeping, by itself, or in conjunction with the other strands of evidence that RBC seeks to knit together, are insufficient to prove RBC's case that the ACPs were non-compliant.

Had Chip Soon breached its duty of care to supply compliant ACPs?

181 RBC's case against Chip Soon in negligence is premised on the ACPs that Chip Soon supplied for the Building being non-compliant with fire safety requirements.

182 As stated above, RBC has failed to prove that those ACPs were non-compliant with fire safety requirements, and accordingly RBC's negligence claim against Chip Soon fails.

183 As such, it is unnecessary for me to decide whether Chip Soon had breached its duty of care, by failing to take reasonable care to ensure that the ACPs supplied for the Building were compliant.

184 I would simply observe that I do not accept RBC's submission that on top of obtaining the 2013 COC, Chip Soon ought to have carried out random testing on the ACPs it was supplying as external cladding.[169] As the local

[169] CCS paras 74–80.

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distributor of the ACPs, Chip Soon was entitled to rely on the 2013 COC as an assurance that Alubond FR B1 ACPs were compliant.[170]

185 As noted above at [149]–[153], Melvin Phua had explained why, from his perspective, the failed surveillance tests following the 2011 COC were not due to the quality of the ACPs. In any event, even if the failed surveillance tests following the 2011 COC were due to quality issues with the FR (430) ACPs, I consider that Chip Soon could still rely on the 2013 COC as an assurance in relation to the FR B1 ACPs that it might prospectively obtain from Eurocon and supply to Chip Soon's customers. I hold this view even if FR B1 ACPs are the same as, or similar to, FR (430) ACPs.

Was RBC contributorily negligent?

186 With my decision against RBC on its negligence claim, it is unnecessary for me to decide whether, if I had found Chip Soon liable, I would also have found RBC contributorily negligent.

187 I nevertheless state my views on this aspect of the matter.

188 Chip Soon submits that RBC was contributorily negligent in two respects:[171]

(a) RBC failed to ensure that cavity barriers were constructed in the concealed space between the ACPs and the reinforced concrete external wall of the Building; and

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170 DCS paras 15 and 17.

171 DCS paras 268–277.

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(b) RBC failed to curb illegal littering and smoking activities at the Building, which caused or contributed to the fire.

189 I do not agree with Chip Soon that RBC was contributorily negligent.

190 It is common ground that no cavity barriers were constructed in the space between the ACPs and the reinforced concrete external wall. It is also common ground that, from a fire safety perspective, it would have been beneficial if that had been done as that would have impeded the spread of fire.[172]

191 There is however a disagreement as to whether the construction of cavity barriers in that space was required by the Fire Code. Chip Soon says that this was required by s 3.11 of the Fire Code 2013; RBC disputes that.[173]

192 Clause 3.11 of the Fire Code 2013, on "Concealed Spaces", provides in cl 3.11.1:[174]

> Concealed spaces in a building shall be interrupted by construction of cavity barriers to restrict the spread of smoke and flames.

193 Clause 1.2.14 of the Fire Code 2013 defines "Concealed space (cavity)" as follows:[175]

> A space enclosed by elements of a building (including a suspended ceiling or raised floor or space between curtain walling and the floor slab or spandrel wall) or contained within an element but not a room, cupboard, circulation space, protected shaft or space within a flue, chute, duct, pipe or conduit.

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172 DCS at para 233; 19 September 2025 NE at p 79 lines 6–12.

173 CCS at para 67; DCS at para 229.

174 2 CBOD 490.

175 2 CBOD 362.

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194 Clause 1.2.8 of the Fire Code 2013 defines "Cavity barrier" as:[176]

> Construction provided:
>
> (a) To seal a cavity (concealed space) against the penetration of smoke and flame, or
>
> (b) Within a cavity (concealed space) to stop the movement of smoke and flame within the cavity.

195 I agree with Chip Soon that:

(a) the space between the ACPs and the external wall was a "Concealed space" or "cavity" as defined in cl 1.2.14 of the Fire Code 2013 – the ACPs were elements of the building, as was the external wall (as the reference to curtain walling was part of an inclusive definition, I do not need to decide if the ACPs were a "curtain wall"); and

(b) Clause 3.11.1 of the Fire Code 2013 therefore required cavity barriers (as defined in cl 1.2.8) to be installed in the space between the ACPs and the external wall, but this was not done.

196 To elaborate on point (a) in the preceding paragraph, RBC cites cl 1.2.21 of the Fire Code 2013, which defines "element of structure", and suggests that that is synonymous with "elements of a building" as used in cl 1.2.14.[177] RBC says the definition "element of structure" in cl 1.2.21 expressly includes an "external wall" (which is defined in cl 1.2.31), and that is conceptually different from "external cladding" (which is defined in cl 1.2.28). The relevant phrase in the definition of "Concealed space (cavity")" in cl 1.2.14 of the Fire Code 2013 is, however, not "element of structure" but "elements of a building". The Fire Code 2013 does not use "element of structure" as synonymous with "element

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176 2 CBOD 361.

177 CCS at para 69.

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of a building" or "building element", as is clear from the definition of "Fire resistance" in cl 1.2.32:[178]

> The minimum period of time during which an element of structure *or* building element may be expected to function satisfactorily while subjected to a standard fire test.
>
> [emphasis added]

197 Cavity barriers ought to have been constructed, and were not. However, it does not necessarily follow that RBC was contributorily negligent. RBC engaged the Contractor to carry out aluminium cladding and louver works ("Renovations"). RBC also engaged an architect as qualified person ("QP") and a registered inspector ("RI") – the RI certified that "the fire safety works in the project have been carried out in accordance with the approved plans of fire safety works, the relevant codes of practice, the Fire Safety Act and any Regulations made thereunder".[179] Chip Soon has not proved that RBC was negligent in its appointment of, or reliance on, the Contractor, the QP, or the RI, such that RBC should be held contributorily negligent.

198 As for the allegations about littering and smoking, RBC had appointed Jones Lang Lasalle Property Consultants Pte Ltd ("JLL") as the integrated facilities manager of the Building.[180] Under the integrated facilities management agreement, JLL was to "Maintain and implement preventative measures against fire and other hazards", and "Remove all fire hazards and bulky goods at common areas including corridors, passages and staircases".[181] JLL had issued: (a) a circular on or around 24 July 2016 to remind tenants that smoking in the

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178 2 CBOD 265.

179 5 CBOD 1786.

180 1 BAEIC 11–13 (paras 16–18).

181 5 CBOD 1823 and 1861.

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Building was prohibited; and (b) a circular on or around 21 October 2016 asking that tenants' staff be reminded to refrain from smoking at the non-designated areas of the Building.[182] Chip Soon has not proved that RBC was negligent in its appointment of, or reliance on, JLL, such that RBC should be held contributorily negligent.

199 If I had found Chip Soon liable in negligence (which I did not), I would thus not have found RBC contributorily negligent.

Conclusion

200 For the above reasons, I dismiss RBC's claim against Chip Soon.

201 If the parties cannot agree on costs within two weeks, within three weeks they may put in costs submissions, limited to ten pages, excluding any schedule of disbursements.

Andre Maniam
Judge of the High Court

S Selvam Satanam @ S Selvam s/o Satanam, Balachandran Arun Amraech and Julia Emma Dcruz (Ramdas & Wong) for the claimant;
Arthur Yap and Ong Hui Jing (Arthur, Darrell & Jing LLC) for the defendant.

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[182] 5 CBOD 1963 and 1976.

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