

No. Fail: JBPM/IP/RNP:700-7/2/7-705 (4)
(PEMBAHARUAN PERTAMA)

SIJIL PEPASANGAN KESELAMATAN KEBAKARAN

APPROVAL CERTIFICATE
Jabatan Bomba dan Penyelamat Malaysia
dengan ini memperakukan
Fire and Rescue Department of Malaysia
hereby certify



BAHAN KELAS 'O'
"VIRGO" MODEL: DM 1209S
HPL thickness: 0.8mm
(total thickness with calcium silicate board: 8.0mm)

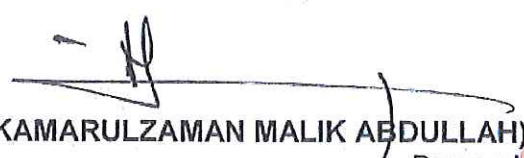
Berdasarkan Piawaian
Complying with

BS 476:PART 6:1989+A1:2009 & BS 476:PART 7:1997

Syarikat Berdaftar
Registered company

VIRGO PACIFIC SDN BHD (1213676-K)
14 Jalan TSB 2,
Taman Industri Sungai Buloh,
47000 Sungai Buloh,
Selangor DE.

Tempoh sah perakuan: 28/05/2021 hingga 27/05/2023


(PKPjB KAMARULZAMAN MALIK ABDULLAH)
Pengarah
Bahagian Perancangan dan Penyelidikan,
b.p. Ketua Pengarah
Jabatan Bomba dan Penyelamat Malaysia.

Tarikh: 11 Oktober 2021

**** Peringatan:**

Sila patuhi sepenuhnya syarat-syarat dan had kegunaan seperti dalam Lampiran A1

No. Fail: JBPM/IP/RNP:700-7/2/7-705 (4)
No.Siri: BB/CO/2743/2019 (P1)

LAMPIRAN A1

Jenis Bahan Binaan	: HIGH PRESSURE LAMINATES (laminated with calcium silicate board)
Jenama & Spesifikasi	: "VIRGO" MODEL: DM 1209S HPL thickness: 0.8mm (total with calcium silicate board: 8.0mm)
Nama & Alamat Pengeluar	: VIRGO LAMINATES, NEW DELHI (INDIA)
Tahap Rintangan Api	: CLASS 'O'
No. Laporan ujian/Tarikh	: SIRIM 2018FE0209 (16/04/2018) & 2018FE0208 (16/04/2018)
Skim Persijilan Barangan	: SIRIM QAS INT. NO.FL000112, NO.SIRI: 067727 (SAH SEHINGGA 27/09/2022)
Had Kegunaan	: PEMASANGAN SEBAGAI BAHAN KELAS 'O'. HENDAKLAH MEMATUHI SPESIFIKASI UJIAN DAN UBBL 1984 SERTA PERLU MEMATUHI SYARAT-SYARAT TAMBAHAN SEPERTI DI LAMPIRAN A2 & A3.

Tempoh sah perakuan: 28/05/2021 hingga 27/05/2023



TEST REPORT

REPORT NO.: 2018FE0209

PAGE 1 **OF** 5

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Applicant/ Manufacturer : **VIRGO PACIFIC SDN. BHD.**
F-9-2, Block F, Pacific Place Signature Office,
Jalan PJU 1A/4, Ara Damansara,
47301 Petaling Jaya,
Selangor Darul Ehsan.
(Attn: Mr. Julian Ong / Ms. Sharon Tan)

Product : **HIGH PRESSURE DECORATIVE LAMINATES**

Reference Standard/ Method of Test : BS 476: Part 6: 1989+A1:2009
Fire Test on Building Materials and Structures
Part 6: Method of Test for Fire Propagation for Products.

Description of Test Specimen : 6 pieces of High Pressure Decorative Laminates.
Size of Specimen : 225mm × 225mm × 8.0mm (measured thickness)
Brand : Virgo
Model : DM 1209 S
Mass Per Unit Area : 9.59 kg/m²

Descriptions of sample as claimed by the submitter: Refer to page 2

The specimens were tested with the laminates face side exposed to the specified heating condition of the fire test.

Date of Test : 27.03.2018

Test Result :	Subindex i1	Subindex i2	Subindex i3	Fire Propagation Index (I)
	2.1	3.8	1.9	7.8

Date Received : 09.02.2018

Job No./ Ref No. : J20181440050 /SQAS/FPS/15/1-5

Issued Date : 16 APR 2018

Approved Signatories :

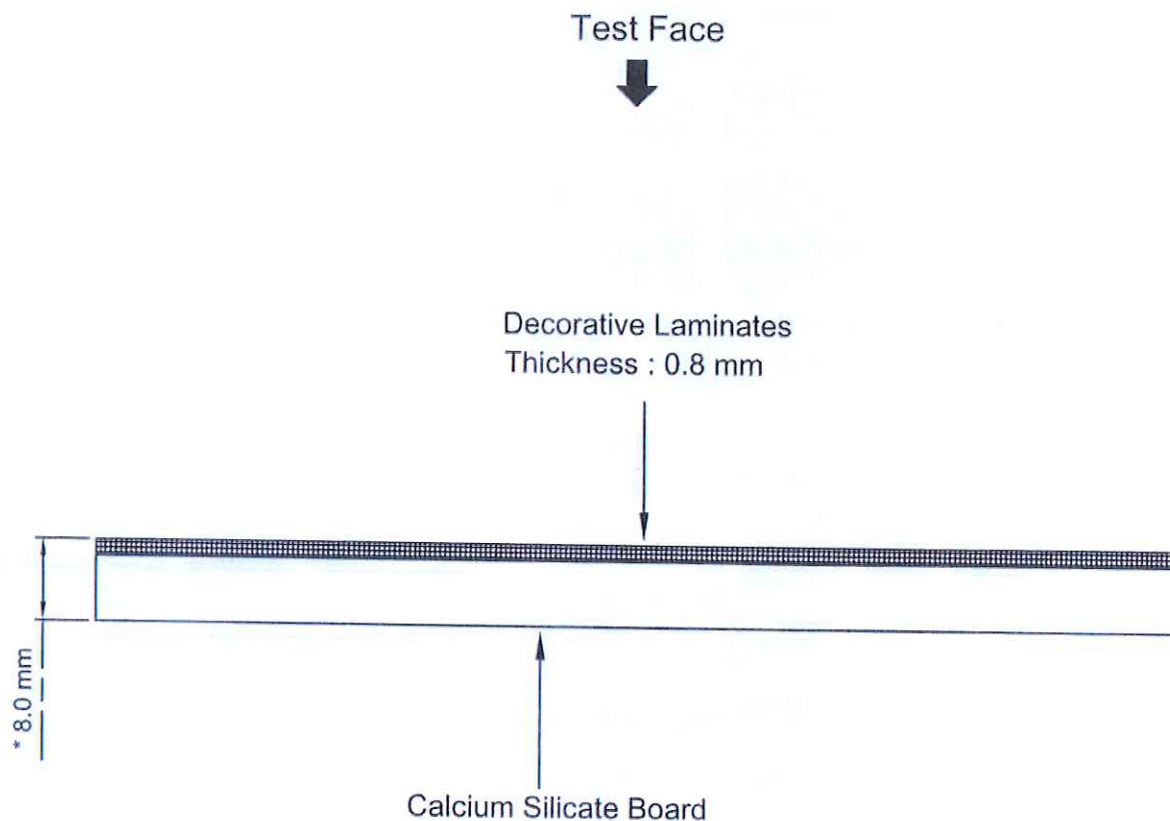

MUHAMMAD SAFUAN MUSA
Testing Executive




ZAINI AHMAD
Group Leader
Fire Protection Section
Testing Services Department
SIRIM QAS International Sdn. Bhd.

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Descriptions of sample as claimed by the submitter:



Note :

* Measured Thickness

High Pressure Decorative Laminates



16 APR 2018

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Product : HIGH PRESSURE DECORATIVE LAMINATES Measured Thickness : 8.0 mm
 Brand : Virgo Mass Per Unit Area : 9.59 kg/m²
 Model : DM 1209 S Date of Test : 27.03.2018

Time (Min.)	Temperature Rise Above Ambient (°C)				
	Calibration	Specimen A	Specimen B	Specimen C	Specimen Average
0.5	13	18	12	17	16
1.0	18	23	18	23	21
1.5	23	29	21	28	26
2.0	26	34	26	33	31
2.5	29	38	31	38	35
3.0	32	44	36	43	41
4.0	66	79	64	79	74
5.0	103	125	104	124	117
6.0	130	200	178	150	176
7.0	152	220	206	170	199
8.0	169	224	222	214	220
9.0	184	240	230	242	237
10.0	195	271	243	260	258
12.0	209	294	277	286	285
14.0	221	292	280	289	287
16.0	230	291	276	289	285
18.0	237	291	274	290	285
20.0	243	292	270	291	284
Subindex 1		3.2	0.2	2.8	2.1
Subindex 2		5.0	3.3	3.2	3.8
Subindex 3		2.1	1.6	2.0	1.9
Index of Performance		10.3	5.1	8.0	7.8



16 APR 2018

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Date of Test : 27.03.2018

No. of Specimen Tested : 3 nos.

The Fire Propagation Index I is 7.8 for the High Pressure Decorative Laminates with mass per unit area of 9.59 kg/m² and measured thickness 8.0 mm.

The Subindex i1 is 2.1

The Subindex i2 is 3.8

The Subindex i3 is 1.9

The test results relate only to the behavior of the test specimens of the product under the particular conditions of test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.



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Product : HIGH PRESSURE DECORATIVE LAMINATES

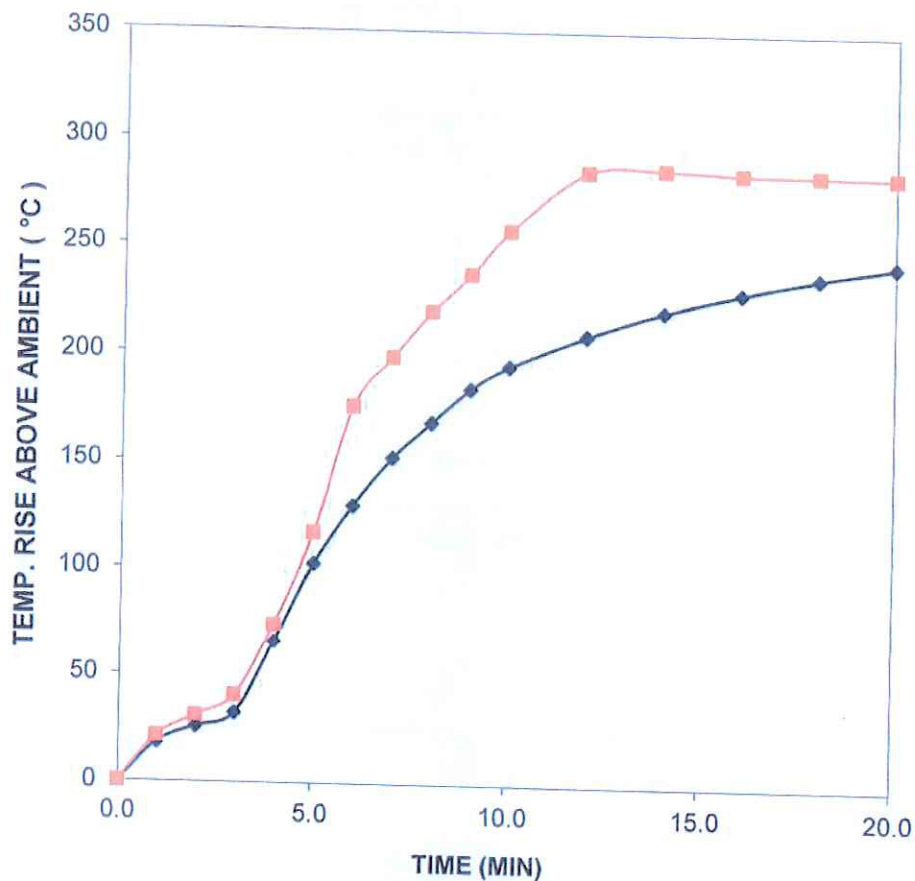
Brand : Virgo

Model : DM 1209 S

Measured Thickness : 8.0 mm

Mass Per Unit Area : 9.59 kg/m²

Date of Test : 27.03.2018



◆ Calibration

■ High Pressure Decorative Laminates



[Signature]

16 APR 2018

TEST REPORT

REPORT NO.: 2018FE0208	PAGE 1 OF 4
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Applicant/ Manufacturer : **VIRGO PACIFIC SDN. BHD.**
F-9-2, Block F, Pacific Place Signature Office,
Jalan PJU 1A/4, Ara Damansara,
47301 Petaling Jaya,
Selangor Darul Ehsan.
(Attn: Mr. Julian Ong / Ms. Sharon Tan)

Product : **HIGH PRESSURE DECORATIVE LAMINATES**

Reference Standard/ Method of Test : **BS 476 : Part 7: 1997**
Fire Test on Building Materials and Structures
Part 7: Surface Spread of Flame Test.

Description of Test Specimen : **9 pieces of High Pressure Decorative Laminates.**
Size of Specimen : **270mm × 885mm × 8.1mm (measured thickness)**
Brand : **Virgo**
Model : **DM 1209 S**
Mass Per Unit Area : **9.88 kg/m²**

Descriptions of sample as claimed by the submitter: Refer to page 2

The specimens were tested with the laminates face side exposed to the specified heating condition of the fire test.

Date of Test : 29.03.2018

Test Result : **Classification of Surface Spread of Flame Test** : **Class 1**

Date Received : 09.02.2018

Job No./ Ref No. : J20181440051 /SQAS/FPS/15/1-6

Issued Date : **16 APR 2018**

Approved Signatories :

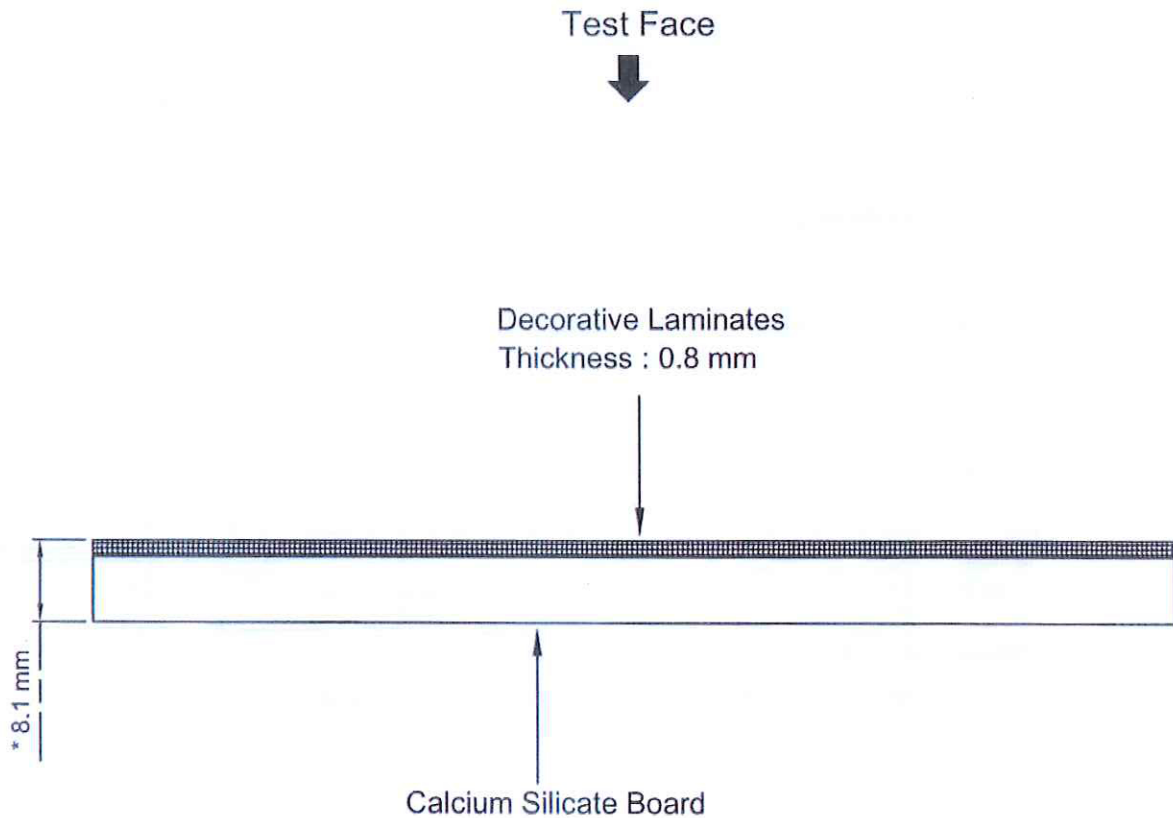

MUHAMMAD SAFUAN MUSA
Testing Executive




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Descriptions of sample as claimed by the submitter:



Note :

* Measured Thickness

High Pressure Decorative Laminates



16 APR 2018

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Name of Applicant : VIRGO PACIFIC SDN. BHD.
Product : HIGH PRESSURE DECORATIVE LAMINATES
Brand : Virgo
Model : DM 1209 S
Measured Thickness : 8.1 mm
Mass Per Unit Area : 9.88 kg/m²
Date of Test : 29.03.2018

Requirement

The flame spread on any specimen of the sample shall not exceed the limit assigned for the class with the proviso that for one specimen only in the sample the flame spread may exceed this limit by the tolerance shown.

Classification of Surface Spread of Flame

Classification	Flame Spread at 1½ min		Final Flame Spread	
	Limit (mm)	Tolerance for one specimen in sample (mm)	Limit (mm)	Tolerance for one specimen in sample (mm)
Class 1	165	25	165	25
Class 2	215	25	455	45
Class 3	265	25	710	75
Class 4	Exceeding Class		3 limits	



16 APR 2018

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Test Results

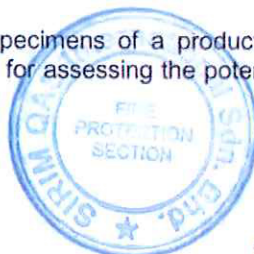
Product : HIGH PRESSURE DECORATIVE LAMINATES Measured Thickness : 8.1 mm
 Brand : Virgo Mass Per Unit Area : 9.88 kg/m²
 Model : DM 1209 S Date of Test : 29.03.2018

Specimen No.	1	2	3	4	5	6
Spread of flame at 1½ minutes (mm)	0	0	0	0	0	0
Distance (mm)	Time of spread of flame to indicated distance (minutes . seconds)					
75	-	-	-	-	-	-
165	-	-	-	-	-	-
190	-	-	-	-	-	-
215	-	-	-	-	-	-
240	-	-	-	-	-	-
265	-	-	-	-	-	-
290	-	-	-	-	-	-
375	-	-	-	-	-	-
455	-	-	-	-	-	-
500	-	-	-	-	-	-
525	-	-	-	-	-	-
600	-	-	-	-	-	-
675	-	-	-	-	-	-
710	-	-	-	-	-	-
750	-	-	-	-	-	-
785	-	-	-	-	-	-
825	-	-	-	-	-	-
865	-	-	-	-	-	-
Time of maximum spread of flame (minutes . seconds)	-	-	-	-	-	-
Distance of maximum spread of flame (mm)	0	0	0	0	0	0

Conclusion

In accordance with the class definition specified in the standard, the test results show that the sample tested has a Class **One** Surface Spread of Flame.

The test results relate only to the behavior of the test specimens of a product under the particular conditions of test; they are not intended to be sole criterion for assessing the potential fire hazard of the product in use.



16 APR 2018