5935-6241-6543-5621

TEST REPORT

1. NO : CT24-050986E
2. Client
   - ○ Name : HYUNDAI L&C
   - ○ Address : 1077, Cheonho-daero, Gangdong-gu, Seoul, Republic of Korea
3. Date of Test : 2024.06.05 ~ 2024.06.26
4. Use of Report : For quality control
5. Test Sample : HANEX N-WHITE
6. Test Method
   (1) ASTM E84-23a

Affirmation	Tested By Name : JEON NAM	Technical Manager Name : Kwon, In Koo

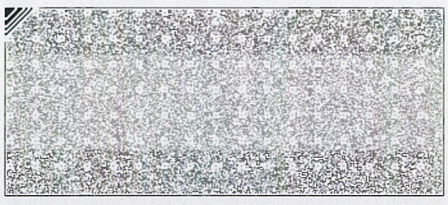
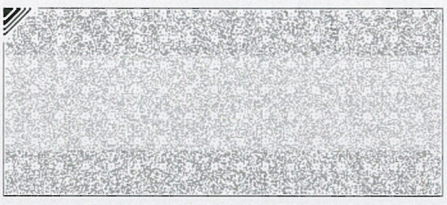
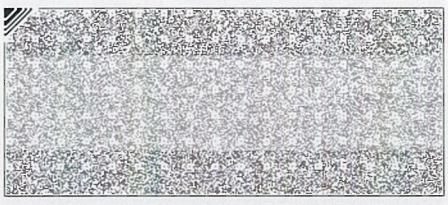
This report is related with KOLAS and KS Q ISO/IEC 17025.
Our report apply only to the standards or procedures identified and to the sample(s) tested unless otherwise specified. The test results are not indicative of representative of the qualities of the lot from which the sample was taken or of apparently identical or similar products. The results of using only a portion of this report cannot be guaranteed. The authenticity of this test report can be checked on KCL website(www.kcl.re.kr).

The above test report provides test result(s) under the scope accredited by Korea Laboratory Accreditation Scheme (KOLAS), which signed the ILAC-MRA.

2024.06.26

Korea Conformity Laboratories

Accredited by KOLAS, Republic of KOREA

TEST REPORT

No. : CT24-050986E

7. Test Results

<table>
<tr><th colspan="3">Test Items</th><th colspan="4">Test Results</th><th>Test Method</th><th>Location</th></tr>
<tr><td rowspan="13">Steiner Tunnel Test</td><td rowspan="11">Flame Spread Results</td><td rowspan="10">Flame Spread</td><td>Feet (ft)</td><td>Time (s)</td><td>Feet (ft)</td><td>Time (s)</td><td rowspan="13">(1)</td><td rowspan="13">A</td></tr>
<tr><td>Ignition</td><td>78</td><td>11</td><td>-</td></tr>
<tr><td>1</td><td>402</td><td>12</td><td>-</td></tr>
<tr><td>2</td><td>481</td><td>13</td><td>-</td></tr>
<tr><td>3</td><td>594</td><td>14</td><td>-</td></tr>
<tr><td>4</td><td>-</td><td>15</td><td>-</td></tr>
<tr><td>5</td><td>-</td><td>16</td><td>-</td></tr>
<tr><td>6</td><td>-</td><td>17</td><td>-</td></tr>
<tr><td>7</td><td>-</td><td>18</td><td>-</td></tr>
<tr><td>8</td><td>-</td><td>19</td><td>-</td></tr>
<tr><td>9</td><td>-</td><td>19.5</td><td>-</td></tr>
<tr><td>10</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td rowspan="4">Calculated value</td><td colspan="3">Calculated Flame Spread (CFS)</td><td colspan="2">4.99</td></tr>
<tr><td colspan="3">**Flame Spread Index (FSI)**</td><td colspan="2">**5**</td></tr>
<tr><td colspan="3">Maximum Flame Spread (ft)</td><td colspan="2">3.00</td></tr>
<tr><td colspan="3">Area Under the Flame Spread Curve (ft · min)</td><td colspan="2">9.68</td></tr>
<tr><td rowspan="4">Smoke Results</td><td rowspan="4">Calculated value</td><td colspan="3">Calculated Smoke Developed (CSD)</td><td colspan="2">10.20</td></tr>
<tr><td colspan="3">**Smoke Developed Index (SDI)**</td><td colspan="2">**10**</td></tr>
<tr><td colspan="3">Under Area Smoke Curve (%Obs · min)</td><td colspan="2">9.40</td></tr>
<tr><td colspan="3">Under Area the Heptane Smoke Curve (%Obs · min) : (Average of 15 calibrations)</td><td colspan="2">97.77</td></tr>
</table>

※ Location

A. 33-72, Eonjang 1-gil, Samcheok-si, Gangwon-state, Korea

COPYRIGHT

TEST REPORT

No. : CT24-050986E

■ Description of specimen and test condition

Items			Test condition	
Test condition			Temp. : 22.2 ℃, Humidity : 57.6 % R.H.	
Description of specimen (Provided by Client)			Artificial marble(12 mm)	
Specimen size / Number of pieces	Specimen 1	Length (mm)	910	8
		Width (mm)	550	
		Thickness (mm)	12	
	Specimen 2	Length (mm)	-	-
		Width (mm)	-	
		Thickness (mm)	-	
Pretreatment			Temp. (23.0 ± 2.8) ℃, Humidity (50 ± 5) R.H.	
Heated surface of specimen			Presented by the client	
Air Velocity (m/s)			1.20	
Draft Reading Range (Pa)			13.7 ~ 24.9 (Setting : 24.0)	
Average Methane Volumetric Flow Rate (L/min)			141.0	
Test duration (min)			10	

TEST REPORT

No. : CT24-050986E

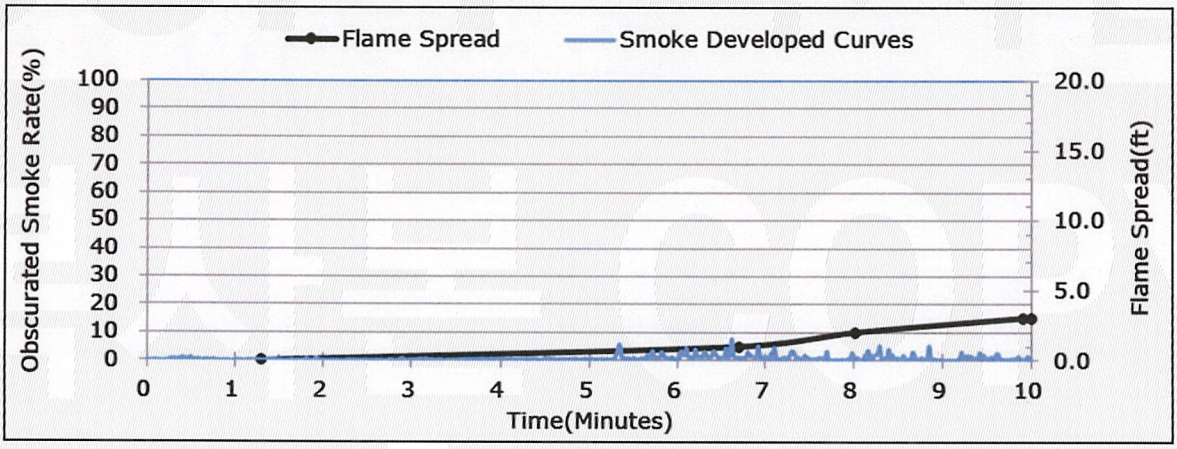
■ Photograph of specimen

Before the test	
After the test	

TEST REPORT

No. : CT24-050986E

■ Flame Spread / Smoke Developed Graph



※ Classification (Reference)

Classifications	Flame Spread Index(FSI)	Smoke Developed Index(SDI)
Class A	0 ~ 25	0 ~ 450
Class B	26 ~ 75	0 ~ 450
Class C	76 ~ 200	0 ~ 450

----- End of Report -----

COPY FREE