

Certificate No. 33405/DBBPAJ  
Date: November 30, 2016



Issuing Office:  
Jl. Arteri Tol Cibitung No. 1, Cibitung Bekasi 17520, Indonesia  
Phone/Facs: +62 21 88321176/88321166  
Email: jum.cbt@sucofindo.co.id

## REPORT OF TESTING

The sample was submitted by client with the following identification:

CLIENT : SHUNDA SUCAI INDONESIA, PT.  
ADDRESS : Jl. Jembatan 3 Komplek 35/O, Jakarta Utara  
NAME OF SAMPLE : PLAFON PVC  
MANUFACTURER : SHUNDA SUCAI INDONESIA, PT.  
TEST REQUIRED :  
- AGEING TEST  
- TENSILE & TENSILE MODULUS  
- FLEXURAL & FLEXURAL MODULUS  
- IMPACT PROPERTIES COMPARISON  
- HEAT DISTORTION TEMPERATURE  
- FIRE RATING  
- UJI IMPACT  
- VOLUME RESISTIVITY  
TEST METHOD :  
- ASTM D638  
- ASTM D790  
- ASTM D648  
- ASTM D257  
- ASTM D257  
- UL 94  
RECEIVED ON : November 2, 2016  
TESTED ON : November 11 - 17, 2016  
RESULT : See attached sheet

The Attachment available is an integral part of this certificate.

This Certificate/report is issued under our General Terms and Conditions, copy of which is available upon request or may be accessed at [www.sucofindo.co.id](http://www.sucofindo.co.id)

CBT200211716-000

SBU Laboratorium



Nanang Yulianto



2420788

SCI-2007A

## REPORT OF TESTING

Result  
 Name of Sample : PLAFON PVC  
 Testing Condition  
 - Temperature : 24.7°C  
 - Humidity : 57 %  
 Equipment Test :  
 - Instron Tensile Machine S/N 318  
 - Digital Caliper S/N 4055862  
 - Softning Temperature Testing 30602136  
 - Terra Ohm Meter S/N 12190876  
 - Temperature & Humadity Chamber S/N 2498  
 - Spring Impact Hammer Test S/N 5040145

| NO    | TEST ITEM                    | UNIT              | STANDARD  | TEST RESULT          |        | REQUIREMENTS |
|-------|------------------------------|-------------------|-----------|----------------------|--------|--------------|
| I.    | Ageing Test                  | -                 | -         | -                    |        |              |
|       | Temperature 100°C            | -                 | -         | No Change            |        | No Change    |
|       | Temperature -15°C            | -                 | -         | No Change            |        | No Change    |
| II.   | Tensile                      | N/mm <sup>2</sup> | ASTM D638 | 27.46                |        | -            |
| III.  | Tensile Modulus              | N/mm <sup>2</sup> | ASTM D638 | 3.73                 |        | -            |
| IV.   | FLEXURAL                     | N/mm <sup>2</sup> | ASTM D790 | 11.58                |        | -            |
| V.    | Flexural Modulus             | N/mm <sup>2</sup> | ASTM D790 | 3.19                 |        | -            |
| VII.  | Impact Properties Comparison | -                 | -         | Accured Arch         |        | Accured Arch |
| VI.   | Heat Distortion              | °C                | ASTM D648 | 46                   |        | ≥45          |
| VII.  | Fire rating                  | -                 | UL 94     | RESULT               | CLASS  | -            |
|       | Vertical                     | Sample 1          | UL 94     | 3.88                 | 94-5VA | 94-5VA       |
|       |                              | Sample 2          |           | 4.74                 | 94-5VA |              |
|       |                              | Sample 3          |           | 3.96                 | 94-5VA |              |
|       | Horizontal                   | Sample 1          |           | 0.51                 | V-0    | V-0          |
|       |                              | Sample 2          |           | 0.39                 | V-0    |              |
|       |                              | Sample 3          |           | 0.57                 | V-0    |              |
| VIII. | Impact Test                  | Joule             | -         | 0.7 Breakdown        |        | -            |
| IX.   | Volume Resistivity           | Ω/mm              | ASTM D257 | 15 x 10 <sup>9</sup> |        |              |



1148270

## REPORT OF TESTING

Note:

| Criteria   | 94-5VA | 64-5VB |
|--|--------|--------|
| Afterflame time plus afterglow time after fifth flame application for each individual bar specimen | ≤60s   | ≤60s   |
| Cotton indicator ignited by flaming particles or drops from any bar specimen                       | No     | No     |
| burn-through (hole) of any laque specimen  | No     | Yes    |

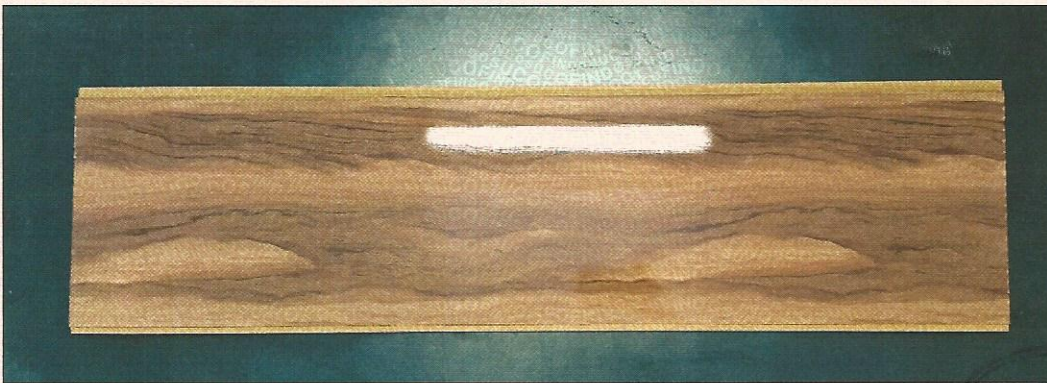
| Criteria Conditions  | V-0  | V-1   | V-2   |
|--|------|-------|-------|
| Afterflame time for each individual specimen t1 or t2  | ≤10s | ≤30s  | ≤30s  |
| total afterflame time for any condition set (t1 plus t2 for the 5 specimens)   | ≤50s | ≤250s | ≤250s |
| Afterflame plus afterglow time for each individual specimen after second flame application (t <sub>2</sub> +t <sub>3</sub> ) | ≤30s | ≤60s  | ≤60s  |
| Afterflame or afterglow of any specimen up to the holding clamp  | No   | No    | No    |
| cotton indicator ignited by flaming particles or drops   | No   | No    | Yes   |



1148271

**ATTACHMENT OF CERTIFICATE**

| TESTING DATE           | NAME OF PRODUCT | TEST REQUIRED  | METHOD  |
|------------------------|-----------------|--|---|
| November 11 - 17, 2016 | PLAFON PVC      | <ul style="list-style-type: none"><li>- AGEING TEST</li><li>- TENSILE &amp; TENSILE MODULUS</li><li>- FLEXURAL &amp; FLEXURAL MODULUS</li><li>- IMPACT PROPERTIES COMPARISON</li><li>- HEAT DISTORTION TEMPERATURE</li><li>- FIRE RATING</li><li>- UJI IMPACT</li><li>- VOLUME RESISTIVITY</li></ul> | <ul style="list-style-type: none"><li>- ASTM D638</li><li>- ASTM D790</li><li>- ASTM D648</li><li>- ASTM D257</li><li>- ASTM D257</li><li>- UL 94</li></ul> |



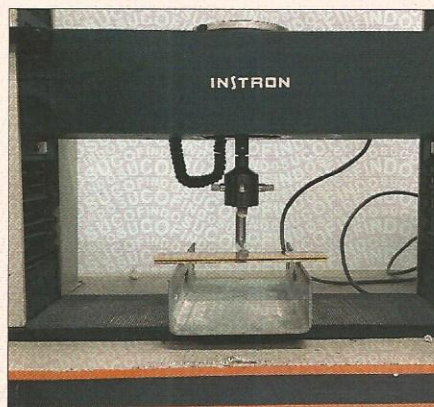
Picture of Sample PLAFON PVC



1148272

**ATTACHMENT OF CERTIFICATE**

| Testing Date           | Name of Product | Test Required   | Method   |
|------------------------|-----------------|---|--|
| November 11 - 17, 2016 | PLAFON PVC      | <ul style="list-style-type: none"><li>- TENSILE &amp; TENSILE MODULUS</li><li>- FLEXURAL &amp; FLEXURAL MODULUS</li></ul> | <ul style="list-style-type: none"><li>- ASTM D638</li><li>- STM D790</li></ul> |



Picture of Testing Tensile and Flexural



1148273

**ATTACHMENT OF CERTIFICATE**

| Testing Date           | Name of Product | Test Required               | Method    |
|------------------------|-----------------|-----------------------------|-----------|
| November 11 - 17, 2016 | PLAFON PVC      | HEAT DISTORTION TEMPERATURE | ASTM D648 |



Picture of Testing Heat Distortion



1148274

