



## NSP N42 SCAFFOLD PLANK

### 1.8E (Light-Weight) - 3.4lbs/ft

| Dry Use Conditions (MC ≤ 16%)         |                     |           |
|---------------------------------------|---------------------|-----------|
| Load Conditions                       | Load Location       | Span (ft) |
| 50 psf                                | Along Span          | 10        |
| 75 psf                                | Along Span          | 8         |
| 500 lbs                               | Center              | 6         |
| Workers & Tools: 25 psf & 200 plf     | Along Span & Center | 9         |
| Workers & Materials: 75 psf & 265 plf | Along Span & Center | 7         |

\*Designed in accordance with CSA S269.2-16. (F.O.S. 4:1)

| Wet Use Conditions (MC > 16%)         |                     |           |
|---------------------------------------|---------------------|-----------|
| Load Conditions                       | Load Location       | Span (ft) |
| 50 psf                                | Along Span          | 9         |
| 75 psf                                | Along Span          | 7         |
| 500 lbs                               | Center              | 5         |
| Workers & Tools: 25 psf & 200 plf     | Along Span & Center | 8         |
| Workers & Materials: 75 psf & 265 plf | Along Span & Center | 6         |

\*Designed in accordance with CSA S269.2-16. (F.O.S. 4:1)

#### General Notes:

1. NSP N42 Planks are 42mm (1-5/8") x 240mm (9-1/2")
2. Spans are from center to center of scaffold supports.
3. Dry use conditions are suitable for use in an environment where the moisture content of the planks will not exceed 16%. Wet use conditions should be used in an environment where the moisture content of the planks is expected to exceed 16%.
4. These span tables are based on criteria specified in CAN/CSA-S269.2 Access Scaffolding for Construction Purposes.

### 2.2E (Heavy-Duty) - 5.0lbs/ft

| Dry Use Conditions (MC ≤ 16%)         |                     |           |
|---------------------------------------|---------------------|-----------|
| Load Conditions                       | Load Location       | Span (ft) |
| 50 psf                                | Along Span          | 10        |
| 75 psf                                | Along Span          | 9         |
| 500 lbs                               | Center              | 7         |
| Workers & Tools: 25 psf & 200 plf     | Along Span & Center | 10        |
| Workers & Materials: 75 psf & 265 plf | Along Span & Center | 8         |

\*Designed in accordance with CSA S269.2-16. (F.O.S. 4:1)

| Wet Use Conditions (MC > 16%)         |                     |           |
|---------------------------------------|---------------------|-----------|
| Load Conditions                       | Load Location       | Span (ft) |
| 50 psf                                | Along Span          | 9         |
| 75 psf                                | Along Span          | 8         |
| 500 lbs                               | Center              | 6         |
| Workers & Tools: 25 psf & 200 plf     | Along Span & Center | 9         |
| Workers & Materials: 75 psf & 265 plf | Along Span & Center | 7         |

\*Designed in accordance with CSA S269.2-16. (F.O.S. 4:1)



## NSP N42 SCAFFOLD PLANK

| Product # | Name                 | Size   | Product Variations   |                     | Weight (MC ~ 12%) |                  |
|-----------|----------------------|--------|----------------------|---------------------|-------------------|------------------|
|           |                      |        |                      |                     | 1.8E              | 2.2E             |
| 03LP1004L | Laminate Plank (LVL) | 4'-0"  | Lightweight (1.8E) ⌚ | Heavy Duty (2.2E) ⌚ | 13.6lbs / 6.2kg   | 20.0lbs / 9.1kg  |
| 03LP1006L | Laminate Plank (LVL) | 6'-0"  | Lightweight (1.8E) ⌚ | Heavy Duty (2.2E) ⌚ | 20.4lbs / 9.3kg   | 30.0lbs / 13.6kg |
| 03LP1008L | Laminate Plank (LVL) | 8'-0"  | Lightweight (1.8E)   | Heavy Duty (2.2E) ⌚ | 27.2lbs / 12.4kg  | 40.0lbs / 18.1kg |
| 03LP1010L | Laminate Plank (LVL) | 10'-0" | Lightweight (1.8E)   | Heavy Duty (2.2E) ⌚ | 34.0lbs / 15.4kg  | 50.0lbs / 22.7kg |
| 03LP1012L | Laminate Plank (LVL) | 12'-0" | Lightweight (1.8E) ⌚ | Heavy Duty (2.2E)   | 40.8lbs / 18.5kg  | 60.0lbs / 27.2kg |
| 03LP1016L | Laminate Plank (LVL) | 16'-0" | Lightweight (1.8E)   | Heavy Duty (2.2E)   | 54.4lbs / 24.7kg  | 80.0lbs / 36.3kg |

⌚ Indicates product size / variant is subject to a lead time.

### Storage & Handling Recommendations:

Correct storage and handling are essential to prevent damage that can shorten the lifespan of your scaffold planks. To maintain performance and extend service life, please review the following guidelines and best practices. Any planks that show signs of damage or have not been stored properly must be taken out of service right away. Continuing to use compromised planks may lead to serious injury or death.

#### Recommended Storage Methods:

1. Choose a suitable storage location: Select a dry, well-ventilated area for storage. Do your best to protect the planks from direct sunlight, precipitation, and extreme temperature variations.
2. Avoid ground contact: Keep the planks off the ground to prevent moisture absorption and potential damage by using pallets, blocks, or any other suitable means to elevate above ground.
3. Stack the planks properly: When stacking, ensure the planks are supported evenly along its length. Use spacers between each layer to allow for proper air circulation. Do not misalign spacers, this helps prevent warping or distortion of the planks.
4. Do not store heavy objects on the planks.
5. Protect from moisture: Planks should be shielded from excessive moisture to maintain its structural integrity. Cover with a waterproof tarp or plastic sheeting to prevent rain or humidity from reaching the planks.
6. Regular inspection: Periodically inspect the stored planks for any signs of damage, moisture infiltration, or insect infestation. If any issues are detected, remove the plank from service.
7. If deemed necessary, verify the moisture content of planks by means of non-destructive field testing. An example of non-destructive field testing can be found on the last page of this document.



#### Recommended Handling Methods:

1. Do not overload the planks: Always refer to NSP allowable loading tables and adhere to stated maximum spans. Remove any plank that has been overloaded from service.
2. Handle planks with care: Do not throw planks or drop planks from heights. A thrown or dropped plank should be evaluated before it is returned back into service.
3. Use caution when handling planks with a forklift. Remove any planks from service that have been damaged from improper handling.

#### Additional Considerations:

1. Do not expose planks to oxidizing chemicals.
2. Do not jump or bounce on planks. Do not drop heavy items on planks.
3. NSP N42 Laminate Scaffold Planks are intended for use as scaffold planks only. All other applications should be verified in advance by NSP.

For more information or questions regarding storage and handling please contact a NSP representative or consult with a trained scaffold professional.



## Visual Inspection & Evaluation:

NSP N42 Laminate Scaffold Planks should be thoroughly visually inspected by a qualified scaffold professional prior to each use. Visual inspection along with proper handling and storage will ensure the safe performance of the planks. Immediately remove damaged scaffold planks from service. Failure to remove planks from service may result in injury or death.

### Common Visual Defects:

1. **End Splits** – A full-depth separation running from one face of the plank to the other, often resulting from repeated cycles of moisture exposure and drying. If an end split extends beyond 12 inches, the plank must be taken out of service.
2. **Cuts, Holes, and Notches** – Any modifications such as saw cuts across the surface, holes drilled through the plank, or notches along the edges can weaken its load-bearing capacity. Planks with these alterations should be removed from use and assessed by a qualified professional.
3. **Edge Splits** – A crack along the plank's narrow edge, commonly caused by forklift impact. Diagonal splits may indicate excessive loading. A probe can determine the depth of the split—shallow weather-related surface checks are acceptable, but if an open split is found, the plank should be taken out of service.
4. **Dents, Gouges, and Depressions** – Structural damage may occur when planks are dropped or struck by heavy objects, leading to dents or indentations. These defects can compromise the integrity of the plank, requiring removal from service and a thorough visual inspection before reuse.
5. **Face Breaks** – Irregular cracks forming across the plank's face, typically due to overloading. These fractures significantly weaken the plank's strength. Any plank with face breaks must be removed from service.

There are other potential visual defects that could indicate a plank should be removed from service including discoloration, which may result from exposure to chemicals, extreme temperatures, or decay. An unusual odor can also indicate chemical degradation. Additionally, soft or spongy wood may develop due to chemical exposure or rot. Planks exhibiting any of these conditions should be removed from service for further evaluation to determine the cause and assess any impact on their load-bearing capacity.



**END SPLIT**



**HOLES & NOTCHES**



**DENTS & GOUGES**



**FACE BREAKS**

*Note: The images shown in this guide are digitally rendered illustrations created to demonstrate typical types of damage found in laminate scaffold planks. They are not photographs and may not accurately reflect how these defects appear in real-world conditions. Variations in material, lighting, and actual wear may cause defects to look different in practice. Always rely on qualified inspection and relevant safety standards to determine whether a plank should be removed from service.*



## EXAMPLE: LAMINATE PLANKS FIELD PROOF TEST PROCEDURE (NON-DESTRUCTIVE)

1. Visually inspect the plank as per the above recommendations. Remove any damaged or defective planks from service.
2. Set up a scaffold structure on level ground such that the plank can be simply supported with at least 12" of overhang on each end.
3. Determine a point of reference that can be used to measure the distance from the plank before and after applying load. For example on level ground, use the ground directly below the center of the plank as your reference point.
4. To begin loading the plank, apply a Pre-load of 20lbs, and record the deflection.
5. Keep the Pre-Load of 20lbs load on the plank and proceed to the next load test (See "Laminate Plank Test Loads" Table below). Apply the test load and record the deflection. If cracking noises are heard when load is applied, take the plank out of service.

| Laminate Plank Test Loads & Deflection Limits |                |                |                    |                |          |
|---|----------------|----------------|--------------------|----------------|----------|
| Plank Variation                               | Test Span (ft) | Test Load (lb) | Maximum Deflection |                |          |
|   |                |                | MC ≤ 12%           | 12% < MC ≤ 16% | MC > 16% |
| <b>Lightweight<br/>(1.8E)</b>                 | 6              | 500            | 17.5mm             | 18.5mm         | 19.5mm   |
|   | 8              | 375            | 31.0mm             | 32.5mm         | 36.0mm   |
|   | 10             | 300            | 49.5mm             | 51.0mm         | 55.5mm   |
|   | 12             | 250            | 71.5mm             | 74.0mm         | 81.5mm   |
| <b>Heavy Duty<br/>(2.2E)</b>                  | 6              | 500            | 13.5mm             | 14.0mm         | 15.0mm   |
|   | 8              | 375            | 23.5mm             | 25.0mm         | 27.0mm   |
|   | 10             | 300            | 37.5mm             | 39.5mm         | 42.0mm   |
|   | 12             | 250            | 54.0mm             | 57.0mm         | 60.5mm   |

\*Deflection is directly proportionate to the load applied, if opting to reduce the test load, reduce the maximum deflection by the same amount (%).

6. Find the approximate moisture content of the plank by using one of the following:
  - Using a moisture meter in at least 3 locations along the plank, follow the manufacturer's guidelines carefully and take the highest reading when proceeding to the next step.
  - Using the following equation:

$$Appx. MC(\%) = \left[ \left[ \frac{Measured Weight (lbs)}{Length (ft) \times Thickness (in) \times Width (in)} \right] \times \left( \frac{144}{OD Weight (pcf)} \right) - 1 \right] \times 100$$

Lightweight (1.8E) OD Weight = 27.9 pcf

Heavy Duty (2.2E) OD Weight = 40.9 pcf

7. Take the difference in deflection from Step 4 & 5, check the deflection in the "Laminate Plank Test Loads & Deflection Limits" Table using the moisture content determined in Step 6. If the deflection exceeds the "Maximum Deflection" value, take the plank out of service.
8. Examine the plank after the load is applied for face cracks, if any are observed, remove the plank from service.
9. Repeat this same process after turning the plank over.

