



## **NUPOLY IMPACT**<sup>™</sup>

### CHEMICAL, MOISTURE & MOLD RESISTANT FLOORING

NuPoly Impact floor paneling successfully meets today's demands while responding to industry challenges of the future. NuPoly Impact combines innovative engineering with cost efficiency, to provide you with a product superior to traditional flooring panel materials.

Nudo features a truly integrated design/build approach. With our in-house sheet extrusion, laminating and panel machining, Nudo is able to offer a completely integrated panel construction from a single source.

### **SURFACE SELECTION**



NuPoly Impact proprietary High Density Polyethylene (HDPE) is laminated to the surface of the panels, providing chemical, moisture and fungus resistance that is easy to clean. NuPoly Impact is available in smooth or textured finishes in various thicknesses (.030", .050", .100", .200") and colors. NuPoly has excellent wearing capabilities for floors or decking and provides a low-skid surface.

#### **Physical and Engineering Properties of Proprietary HDPE (High Density Polyethylene)**

| ASTM TEST             |        | VALUE/UNIT       |
|-----------------------|--------|------------------|
| Hardness, Rockwell R  | D-785  | 40-80            |
| Flame spread          | E-84   | 97.8 - Class 3/C |
| Smoke density         | E-84   | 350 - Class 3/C  |
| Ignition temperature  | D-1929 | 645 °F           |
| Oxygen index          | D-2863 | 17.4             |
| Abrasion resistance   | D-1044 | 1-5mg/1000       |
| IZOD impact           | D-256  | 7.0 ft-lbs/in    |
| Flexural stiffness    | D-747  | 132,000 psi      |
| Torsional stiffness   | D-1043 | 140,000 psi      |
| 1% Secant modulus     | D-638  | 135,700 psi      |
| Elongation            | D-638  | 960%             |
| Tensile strength      | D-638  | 4450 psi         |
| Melt index            | D-1238 | 0.26g/10 min     |
| Density               | D-1505 | 0.957 min 9/cc   |
| Low temp. Brittleness | D-746  | L-76 °C          |



### **Finish Options**



Smooth









can Ha

Quadripp



### PANEL CONFIGURATION

The NuPoly Impact panels reduce abrasion and shear forces that are directly applied onto flooring surfaces by providing superior wearing characteristics. Nudo's integrated design/build approach provides you a single source solution to help meet performance requirements.

#### **NuPoly Impact Standard Product Options**

Nudo NuPoly Impact<sup>™</sup> factory laminated HDPE panel colors come in all finishes: Quadripple [QE], Moroccan [ME], Cracked Ice [E], Smooth [SE] or Haircell [HC] and shall be uniform as specified [Table 1].

Table 1

| Part Number Identifier                | Finishes                         | Nominal<br>BPLite™<br>Thickness | Substrate<br>Thickness/<br>Description  | Size        | Color                  |
|---------------------------------------|----------------------------------|---------------------------------|---|-------------|------------------------|
| [QE, ME, E, SE, HC] [3,5,10] P375     |                                  |                                 | <sup>3/8</sup> " Fir Exterior plywood   |             |                        |
| [QE, ME, E, SE, HC] [3,5,10] P500     | Ouadripplo* [OE]                 |                                 | ½" Fir Exterior plywood                 |             | Black                  |
| [QE, ME, E, SE, HC] [3,5,10] P625     | Quadripple* [QE]  Moroccan* [ME] | .030"**                         | <sup>5/8"</sup> Fir Exterior<br>plywood | 4 x 8,10,12 | Gray                   |
| [QE, ME, E, SE, HC] [3,5,10] P750     | Cracked Ice* [E]                 | .050"                           | <sup>3/4"</sup> Fir Exterior plywood    |             | [Custom<br>colors      |
| [QE, ME, E, SE, HC] [3,5,10]<br>P1000 | Smooth* [SE]                     | .100"                           | <sup>1"</sup> Fir Exterior plywood      |             | available with minimum |
| [QE, ME, E, SE, HC] [3,5,10]W625      | Haircell* [HC]                   |                                 | <sup>5/8"</sup> Waferboard/<br>OSB      | 4 x 8,10    | order]                 |

<sup>\*</sup> NuPoly Impact ESD - Electrostatic dissipative extruded additive available

#### **Recommended Proprietary HDPE thickness for specifications required (Wheel Loads)**

0.030" - Pedestrian traffic

0.050" - Light cart traffic to 200# per wheel\*

0.100" - Heavy cart and pallet jacks to 1000# per wheel

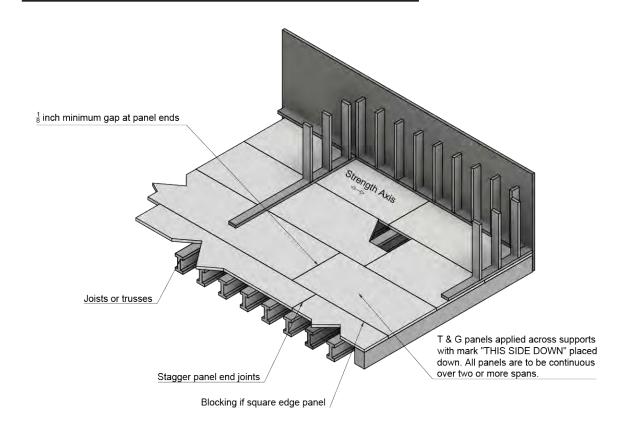
- \* Based upon a 1.785" (wide) x 7" (diameter) hard plastic wheel footprint = 0.57 square inch
- \*\* Based upon a 3.5" (wide) x 2.75" (diameter) steel pallet jack roller footprint = 0.64 square inch
- \*\*\* NuPoly Impact ESD provides superior protection for sensitive electronic devices when properly installed using grounding screws.

Note: Actual weight per wheel loading must be adjusted to compensate for the actual footprint of the wheels to be used.

<sup>\*\*</sup>Quadripple is not available in .030"

<sup>\*\*</sup> Thicker laminates available for heavier application

## **PANEL TOLERANCES**



| SHEATHING SPAN<br>SUBFLOOR: SHEATHING AND STRUCTURAL I |                    |                                     |  |
|--|--------------------|-------------------------------------|--|
| SUPPORT SPACING (inches)                               | SPAN RATING        | NOMINAL PANEL<br>THICKNESS (inches) |  |
| 16 ¹   | 24/16              | 7/16, 15/32, 1/2                    |  |
|  | 32/16              | 15/32, 1/2, 19/32, 5/8              |  |
| 19.2, 20   | 40/20              | 10/22 5/9 22/22 2/4                 |  |
| 24   | 40/20 <sup>2</sup> | 19/32, 5/8, 23/32, 3/4              |  |
| 24   | 48/24              | 23/32, 3/4, 7/8                     |  |

|                |  | MAXIMUM<br>SPAN<br>(inches) | ALLOW          | /ABLE |       | LOAD <sup>2</sup> |
|----------------|--|-----------------------------|----------------|-------|-------|-------------------|
| SPAN<br>RATING | NOMINAL PANEL<br>THICKNESS<br>(inches) | WITH EDGE                   | SPACII<br>CENT |       | O-CEN |                   |
|                | SUPPORT <sup>1</sup>                   | 12                          | 16             | 19    | 24    |                   |
| 16oc           | 19/32,5/8                              | 164                         | 185            | 100   |       |                   |
| 20oc           | 19/32, 5/8, 3/4                        | 20 <sup>4,5</sup>           | 270            | 150   | 100   |                   |
| 24oc           | 23/32, 3/4                             | 24                          |                | 240   | 160   | 100               |

- 1. Is permitted to be 24 inches on center for panels with span rating of 32/16 or 16oc where ¾ inches wood strip flooring is installed perpendicular to the supports.
- 2. Acceptable where ¾ inch wood strip flooring is installed perpendicular to supports or where 1-1/2 inches of cellular or lightweight concrete is applied over the panels.

# **PERFORMANCE TEST RESULTS**

| ASTM D257 – Resistance Results       | Average                       |
|--------------------------------------|-------------------------------|
| Surface Resistance R <sub>s</sub>    | 4.060 x 10 <sup>8</sup> Ω     |
| Surface Resistivity P <sub>s</sub>   | $2.130 \times 10^{10} \Omega$ |
| Volume Resistance R <sub>v</sub>     | $3.095 \times 10^{12} \Omega$ |
| Volume Resistivity P <sub>v</sub>    | 2.770 x 10 <sup>14</sup> Ω-cm |
| Insulation Resistance R <sub>i</sub> | 5.030 x 10 <sup>8</sup> Ω-cm  |

| ASTM C1028 Coefficient of Friction Results |      |      |
|--|------|------|
| Condition                                  | Dry  | Wet  |
| Average                                    | 0.67 | 0.50 |

| ASTM 4060 Abrasion Results |  |  |
|----------------------------|--|--|
| Weight                     | Number of Cycles to Wear Point Average |  |
| 500g                       | 1191                                   |  |
| 1000g                      | 583                                    |  |

| ASTM 523 Gloss Results       |     |  |
|------------------------------|-----|--|
| Geometry Average Gloss Units |     |  |
| 20°                          | 0.0 |  |
| 60°                          | 1.4 |  |
| 85°                          | 0.1 |  |



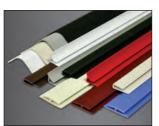
### YOUR VISION IS OUR MISSION™

When we meet with clients for the first time, we tend to hear the same comments: "A need for cost-effective solutions, accurate information, quality products and on-time delivery." For over 60 years, Nudo has partnered with customers to offer solutions to meet their vision in the building products, signage, transportation and architectural design industries.

We specialize in ceiling, wall, floor, exterior and sign panels, as well as a wide range of panel accessories. Our focus on responsiveness and consistency has earned us a leadership position in producing panel products with a variety of substrates.



**Laminated Panels** 



**PVC Moldings** 



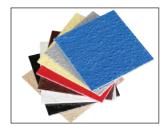
**HDPE Panels** 



**Rivets & Fasteners** 



Sign Panels



**FRP Panels** 



**Interlocking Panels** 



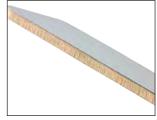
**Decorative Wall Panels** 



**In-Fill Panels** 



**Honeycomb Panels** 



**Porcelain Wall Panels** 



**Truck & Trailer Panels** 

#### **VISIT WWW.NUDO.COM TO LEARN MORE**

A VERZATEC COMPANY

1500 Taylor Avenue Springfield, IL 62703 www.Nudo.com Ph: 800.826.4132 Fax: 217.528.8722 Visit www.Nudo.com or contact our local dealer for details.

Form 1003.L.REV.04/18