## TECHNICAL DATA SHEET POWERHOLD PLUS UNDERLAYMENT

| Material:                               | 6 mm (5 ply) & 9mm (7 ply) Plywood; 100% birch hardwood construction   |
|---|--|
| Glue:                                   | Exterior Grade; Passes APA Boil Test   |
| Formaldehyde:                           | <0.05ppm - Meets California Air Resources Board (CARB) Regulation 93120 phases I & II  |
| Dimensions:                             | Available in 4' x 4', 4' x 5' & 4' x 8' panel - 6mm and 4' x 4' - 9mm  Precision square cut for a TileTite fit. Each panel ultrasonically tested for voids.          |
| Nailing Pattern:                        | Each panel is printed with a proprietary nailing pattern for proper installation.  |
| Core:                                   | Rugged solid puncture resistant Birch hardwood core.   |
| Thickness:                              | <ul> <li>6mm (1/4") for vinyl floors and general purpose use.</li> <li>9mm (3/8") for ceramic tile areas and where a subfloor build-up is required.</li> </ul>       |
| Surface Treatment:                      | Fine sanded face and touch sanded back to provide a smooth surface and consistent thickness.   |
| Moisture Content:                       | 6.5% (50%RH @ 20°C)  |
| Stain Resistance:                       | Non-staining veneers and ink; compatible with all vinyl floor coverings.   |
| Density:                                | 41.8 lbs/cu.ft.  |
| *Internal Bond:                         | 375.0 PSI  |
| *Modulus of Elasticity:                 | Perpendicular: 796,000 PSI<br>Parallel: 2,048,000 PSI  |
| *Compression:<br>(Crushing Strength)    | 3996 lbs/ln <sup>2</sup>   |
| *Janka Ball Hardness:                   | 1370 lbs.  |
| *Thickness Swell:                       |  |
| 2-Hour Soak:                            | 4.5%   |
| 24-Hour Soak:                           | 8.0%   |
| *Linear Expansion:                      | Perpendicular % Change: 0.077%@ 50% - 90% Relative Humidity Parallel % Change: 0.086@ 50% - 90% Relative Humidity  |
| Thermal Resistance:                     | 6mm - 0.31 ft <sup>2</sup> -hr-°F/BTU  |
| (R-Value)                               | 9mm - 0.43 ft <sup>2</sup> -hr-°F/BTU  |
| Flame Spread Rating:                    | 80 - 200   |
| Flame Spread Class:                     | Class III or Class C   |
| Standards:                              | Meets the requirements of: American Plywood Association APA PS 1-07; American Society for Testing and Materials *ASTM D1037; Canadian Standards Association CSA 0153 |
| Vinyl Manufacturers<br>Recommendations: | Meets requirements of Armstrong, Congoleum, Mannington and Tarkett.  |
| Ceramic Tile:                           | 9mm Matrixx meets TCNA F 160-07 for installation of ceramic tile over wood sub-floors.   |
| ACEY ACT:                               |  |
| AOLI AOI:                               | POWERHOLD PLUS Hardwood Underlayment is sourced in compliance with Lacey Act.  |