

COMPARISON OF NOMAFLEX® AND ASPHALT-IMPREGNATED FIBERBOARD



Referenced Standard Test Methods: ASTM D 8139
 Referenced Standard Test Methods: ASTM D 545 and AASHTO T 42
 Referenced Standard Specifications: ASTM D 1751 and AASHTO M 213

| Physical Properties | Nomaflex | Asphalt-Impregnated Fiberboard | Added Value of Nomaflex |
|---|--|--|--|
| Water absorption | < 1% by volume: Does not swell or absorb any practical amount of water | Absorbs water up to 15% by volume in 24 hours, then swells and separates | Nomaflex will last longer in the presence of moisture and ongoing precipitation |
| Compression (to 50%) | Minimum > 30 psi, Maximum < 60 psi | Minimum > 100 psi, Maximum < 750 psi | Nomaflex withstands concrete expansion / contraction with no impact on structural integrity |
| Recovery (from 50%) | > 80% Compression Recovery | > 70% Compression Recovery | Nomaflex stays in place and keeps the joint free of debris with or without a sealant |
| Extrusion (at 50%) | < 0.1 in. movement | < 0.25 in. movement, (frequently misses this test approval due to variance in product composition) | Nomaflex offers more consistency and stability due to its polypropylene composition |
| Expansion in boiling water | < 1% expansion | No published test results to this standard | Nomaflex shows superior performance (both structurally and for moisture resistance) with this extreme test |
| Disintegration in boiling hydrochloric acid (HCl) | No disintegration after immersion in boiling hydrochloric acid (HCl) for 1 hr. | No published test results to this standard | Nomaflex shows superior performance (both structurally and with chemical resistance) with this extreme test |
| Density | > 3.5 lbs./cu.ft. | > 18 lbs./cu.ft. | Nomaflex is light weight and easier to handle, and its polypropylene composition provides rigidity with superior resistance to breakage |
| Sealant compatibility | Compatible with all known concrete joint sealants | Not always compatible with polyurethane or silicone based sealants as indicated by the sealant manufacturers | Nomaflex® allows for a superior bond between the concrete and sealant without 3-sided adhesion or impacting cure times, nor will it discolor the sealant as seen with asphalt-impregnated fiberboard due to asphalt leaching |
| UV resistance | Excellent UV resistance | Good UV resistance | Nomaflex is made with UV inhibitors for extended life with or without joint sealant |
| Chemical Resistance | Excellent chemical resistance (polypropylene is a chemically inert compound) | Fair chemical resistance (fibers come apart in the presence of various chemical) | Nomaflex is chemically inert. Asphalt-impregnated fiberboard is not. Nomaflex will not react with salts, gasoline products, motor oils, acetone and countless chemicals used on and around concrete structures |