



## Installation Instructions:

Rev March 17, 2021

**USE:** HYDRA is a premium quality breathable synthetic roofing underlayment designed for use in steep slope roofing as a water resistant secondary layer of protection. HYDRA breathes so that it does not lock in moisture that can cause damage to the roof deck or building interior. HYDRA is designed to withstand up to 90 days of UV exposure without physically degrading. However, this is not referring to its ability to withstand exposure to heavy rain, snow, and high winds. HYDRA provides a water resistant protection only and is **Not** waterproof. It is not designed to be used as a temporary roof to protect property or possessions. HYDRA is approved for installation over plywood or OSB roof decking with proper fasteners on roof slopes 2:12 and greater. It is an ideal solution for breathable roof systems such as metal, tile, slate, and cedar shingles, but can also be used under asphalt or synthetic shingles.

### VENTILATION CONSIDERATIONS:

It is important to ensure your roof design provides proper ventilation to help avoid high humidity, condensation, and mold growth problems. A design professional should be consulted to avoid the potential for moisture entrapment, buildup, or condensation. Local building codes for your specific area should also be reviewed for ventilation requirements.

**DECK PREPARATION:** HYDRA should be installed over a clean, smooth, and dry deck. The deck should be structurally sound and should not have any voids, protrusions, damaged or unsupported areas. For re-roofing projects, replace any water damaged sheathing and sweep roof deck thoroughly removing dust, dirt and loose nails. Do not install over old roof covering.

**FASTENERS:** For best performance and extended exposures greater than 1 day and up to 180 days HYDRA should be installed with 1" diameter plastic or metal cap, corrosive resistant, roofing nails with 1" leg or greater (ring shank preferred), or 1" diameter plastic cap staples.

If HYDRA is to be covered within 5 days by primary roofing and no driving rain or high wind events are expected it can be installed with corrosive resistant 3/8" head roofing nails with 1" leg or greater (ring shank recommended). In this case every other anchoring point in the field of the product is acceptable. **Note:** Use of un-capped fasteners may result in blow off or leakage around fastener penetrations during a rain or high wind event.

For coastal areas and extended exposure conditions where driving rain or strong winds are expected it is recommended to take additional precautions such as doubling all lap widths, adding an adhesive on overlaps, and/or taping all roof deck seams and/or underlayment overlap seams including the perimeter edges of the roof. For taping roof deck seams and perimeter edges consider FT Copperhead butyl roofing tape. For adhesive use a low solvent plastic roofing cement meeting ASTM D-4586 Type 1 or Federal Spec SS-153 Type 1, such as Karnak, Henry, DAP or equivalent.

**APPLICATION:** For slopes **4:12 and greater** HYDRA underlayment is to be installed horizontally (parallel to the eave) with the printed side up using the provided lap lines. Use 6" vertical laps and 4" horizontal laps. Underlayment to be installed in shingle lap fashion starting at the bottom edge of the roof deck to ensure that the water runs over the overlaps without



getting under the material. Align the underlayment to the edge of the rake and eaves. HYDRA should be applied under the metal drip edge along the rakes and over the metal drip edge along the eaves unless otherwise specified by local building codes. Do not fold HYDRA over the roof edge unless this edge is to be subsequently covered over by a drip edge or other flashing material. Note: All end laps of succeeding courses should be offset by a minimum of 6 feet. HYDRA to be fastened using the nail pattern as printed on the product. All anchoring must be performed snug and hammered flush and at 90 degrees to the roof deck, ensuring the material surface is held tightly with the roof deck. Do not install fasteners over unsupported areas/voids. Extend product a minimum of 12" past all hips and valleys, and lap up onto walls and abutments a minimum of 8". For batten secured installations use appropriate length ring shank nails or screws to secure battens to the roof deck, staples are not recommended. Do not install battens over cap nails.

For **low slope** applications between 2:12 and 4:12 it is recommended to cover the roof deck with two layers of HYDRA. Begin by installing a 24" wide strip along the eave with minimal fasteners. Then cover with a full 48" width of HYDRA. Then overlap each successive course by 50% plus 1 inch(25"). Vertical lap requirements are the same as in 4:12 and greater slopes. Note: Product is not recommended for slopes less than 2:12.

If installing an ice and water protection barrier it should be installed first along the eaves and in the valleys. It is recommended to use an ASTM D1970 approved waterproof membrane such as FT Platinum HTSA, Komodo BSA, or Cobalt Ultra. For additional rake edge waterproofing apply a minimum 6" strip of adhesive backed roofing seam tape flush to the rake edge on top of the HYDRA, then install the metal drip edge. Consider using FT Copperhead butyl roofing seam and flashing tape.

HYDRA has 90 Day UV protection and is not designed for indefinite outdoor exposure. It is therefore recommended that installation of the primary roofing material be installed within 90 Days.

### **CAUTION – Read Good Safety Practice Below**

As with any roofing product, always follow safe roofing codes & practices (OSHA) and always use and wear fall protection devices when working on roofs. Release liners are slippery and should be removed from work area immediately after application. Use caution when walking or standing on HYDRA as slip resistance may vary with surface conditions, weather, footwear and roof pitch. Failure to use proper safety gear and footwear can result in serious injury.