

Product Overview

AVA REVV and VEXX are premium, commercial grade sheet vinyl products. REVV features a full line of popular, embossed-in-register wood looks, while VEXX is comprised of unique organic patterns, both providing a wide range of beautiful flooring options for all applications. REVV and VEXX are

constructed with a durable wear layer and topped with our proprietary AMP polyurethane coating, making it an ideal flooring product for healthcare, education, retail spaces, hospitality and a variety of other commercial environments. Revv and Vexx are the perfect long term solution for heavy

traffic areas, including areas with heavy rolling loads. REVV and VEXX are FloorScore certified, Declare labeled, REACH compliant and has published UL Certified Environmental and Health Product Declaration Forms (EPDs & HPDs), making it a sustainable product selection in the sheet vinyl category.

Features & Benefits

- ▶ **Easy To Maintain**
- ▶ **AMP Urethane Finish**
- ▶ **Extremely Durable**
- ▶ **Phthlate Free Vinyl**
- ▶ **Qualifies for LEED® Credits**
- ▶ **FloorScore® Certified**
- ▶ **Declare™ Labeled**
- ▶ **UL® Certified HPDs & EPDs**

Technical Data

Dimensions: **6.56' x 65.6' x 2.3 mm**

Wear Layer Thickness: **22 mil (0.55 mm)**

Finish: **AMP Polyurethane Coating**

Surface - REVV: **Embossed In Register**

Surface - VEXX: **Smooth**

Quantity / Roll: **47.84 sq. yd. (430.5 sq. ft.)**

Weight / Roll: **322 lbs.**

Quantity / Pallet: **6 Rolls (287.04 sq. yd.)**

Weight / Pallet: **2,007 lbs.**

ASTM F1303 - Sheet Vinyl w/ Backing: **Type I, Grade I, Class B**

ASTM F1914 - Residual Indentation: **Passes, ≤ 0.12 in.**

ASTM F137 - Flexibility: **Passes, 6.4 mm Mandrel**

ASTM F925 - Chemical Resistance: **Passes (ask for chart)**

ASTM F1514 - Heat Color Stability: **Passes, < Δ8E**

ASTM F1515 - Light Color Stability: **Passes, < Δ8E**

ASTM F970 - Static Load Limit: **Passes, 250 lbs.**

ASTM E648 (NFPA 253) - Critical Radiant Flux: **Class I, >0.45 W/cm²**

ASTM E662 (NFPA 258) - Smoke Density: **Passes, <450**

UL 410 - Slip Resistance: **>0.6 (dry)**

CHPS / CA Section 01350: **Compliant**

Acclimation Time: **48 Hours**

Storage & Acclimation Conditions: **65° - 85° F**

Additional Information

Approved Adhesives

Novalis NFA-T226 Acrylic Adhesive

Novalis NFA-S300 Aerosol Adhesive

Gold Series MW 3010 MS Adhesive

Accessories

Matching heat weld rod and silicone caulk are available for REVV and VEXX.

1. PRE-INSTALLATION

- Consult all associated product literature concerning adhesive installation, maintenance and warranty prior to installation of flooring.
- Allow all trades to complete work prior to installation.
- Deliver all materials to the installation location in its original packaging with labels intact.
- Do not stack pallets to avoid damage.
- Remove all plastic and strapping from product after delivery.
- Remove rolls from pallet and store upright with the cap-end down to prevent distortion and compression until ready for installation.
- Ensure that all adhesives intended for installation are approved for use with flooring material.
- Ensure HVAC system is operational and fully functioning at normal operating conditions.
- Ensure installation area and material storage conditions are between 65° F (19° C) and 85° F (30° C) and 45% and 55% RH for at least 72 hours before, during and continuously after installation.
- Protect installation area from extreme climate changes, such as heat, freezing and humidity, as well as direct sunlight for at least 72 hours before, during and after installation.
- Ensure all substrate preparation and moisture testing requirements have been performed, read and/or understood by all interested parties.
- Do not proceed with installation until all conditions have been met.

2. PRODUCT LIMITATIONS

Do not install materials directly over existing adhesive, adhesive residue, existing resilient flooring, hardwood flooring, cork flooring, rubber flooring or asphaltic materials. Do not install in areas that may be subjected to sharp, pointed objects, such as stiletto heels, cleats or spikes. Do not allow product to be directly exposed to extreme heat sources, such as radiators, ovens or other high-heat

equipment. Do not install outdoors or in areas that may be exposed to repeated and sustained UV light, as product may fade, discolor or experience excessive movement. When installed beneath hospital beds or in areas that may be exposed to heavy rolling loads, the S300 Aerosol Adhesive or the MW 3010 MS Adhesive must be used. Material may be susceptible to staining from rubber tires, casters or rubber-backed walk-off mats, as well as harsh disinfectants, cleaning agents, dyes or other harsh chemicals – ensure all chemicals and materials that may come in contact with flooring surface will not stain, mar or otherwise damage the flooring material prior to use.

3. SUBSTRATE PREPARATION

All substrates must be prepared according to ASTM F710, as well as all other applicable ASTM, ACI and RFCI guidelines. Substrates must clean, smooth, permanently dry, flat, and structurally sound. Substrates must be free of visible water or moisture, dust, sealers, paint, sweeping compounds, curing compounds, residual adhesives and adhesive removers, concrete hardeners or densifiers, solvents, wax, oil, grease, asphalt, visible alkaline salts or excessive efflorescence, mold, mildew and all other extraneous coating, film, material or foreign matter.

All substrates must have all existing adhesives, incompatible materials, contaminants or bond-breakers mechanically removed via scraping, sanding or grinding prior to adhesive installation. In extreme situations, shotblasting may be required. Mechanical preparation must expose at least 90% of the original substrate. Following cleaning and removal, all substrates must be vacuumed with a flat vacuum attachment or damp mopped with clean, potable water to remove all surface dust. **Sweeping without vacuuming or damp mopping will not be acceptable.**

All porous substrates must be tested per ASTM F3191 to confirm porosity. All substrates that do not meet porosity requirements are considered non-porous. Ensure that all non-porous substrates are not contaminated with aforementioned

contaminates and that all installation guidelines for non-porous substrates are followed. It is recommended that all substrates have a floor flatness of FF32 and/or a flatness tolerance of 1/8" in 6' or 3/16" in 10'. Substrates that do not meet this requirement should have a compatible cementitious patch or self-leveling underlayment installed to flatten the installation area.

Do not use solvent/citrus based adhesive removers prior to installation. Follow The Resilient Floor Covering Institute's (RFCI) "Recommended Work Practice for Removal of Existing Floor Covering and Adhesive", and all applicable local, state, federal and industry regulations and guidelines. When removing asbestos and asbestos containing materials, follow all applicable OSHA standards.

CEMENTITIOUS SUBSTRATES

All cementitious substrates, including self-leveling underlayments, must have a minimum compressive strength of 3000 PSI and be prepared in accordance with ASTM F710 and ACI 302.2R. When flooring is being installed directly over concrete, surfaces that have an ICRI Concrete Surface Profile (CSP) of 5 or more should be smoothed with a self-leveling underlayment or a cementitious patch to prevent imperfections from telegraphing through flooring materials. On or below grade concrete must have a permanent, effective moisture vapor retarder installed below the slab.

New or existing concrete substrates on all grade levels must be tested in accordance with ASTM F2170, using in situ Probes, to quantitatively determine relative humidity no more than one week prior to the installation.

Moisture Limits

NFA-T226 Acrylic Adhesive

- 85% RH
- 5 lbs. MVER

NFA-S300 Aerosol Adhesive

- 90% RH
- 9 lbs. MVER

MW 3010 MS Adhesive

- 95% RH
- 8 lbs. MVER

In addition to ASTM F2170 Relative Humidity Testing, existing concrete that has previously had floor covering installed on all grade levels must be tested in accordance with ASTM F1869, using Calcium Chloride test kits, to quantitatively determine the Moisture Vapor Emissions Rate (MVER) of the concrete.

If ASTM F2170 or ASTM F1869 test results exceed the prescribed limits, a moisture mitigation product must be installed prior to proceeding with installation. Do not install flooring until moisture testing has been conducted per the appropriate standard and/or moisture mitigation has been installed and is dry to the touch. Do not install flooring in below grade areas when hydrostatic pressure is visible or suspected.

LIGHTWEIGHT/GYPSUM SUBSTRATES

Lightweight or gypsum substrates must have a minimum compressive strength of 2000 PSI when installed over a wood substrate or 3000 PSI when installed over a concrete substrate. Lightweight or gypsum substrates must be installed and prepared in accordance with ASTM F2419 or ASTM F2471, respectively. Lightweight or gypsum substrates that do not meet these requirements should be strengthened with a compatible repair product to improve the compressive strength of the substrate. Substrate must be structurally sound and firmly bonded to subfloor. All cracked or fractured areas must be removed and repaired with a compatible repair product. New or existing substrates may require a sealant or primer be installed prior to resilient floor installation. Follow the substrate manufacturer's recommendations regarding preparation for resilient flooring.

WOOD SUBSTRATES

Wood substrates must be compliant with and prepared in accordance with ASTM F1482. Wood substrates should be of double layer construction with a recommended total thickness of 1" or more (depending on federal, state and local building codes). For standard installations, the top layer must be an APA Underlayment Grade plywood or

equivalent with a minimum thickness of 1/4". Plywood must be smooth, free of knots or voids and fully sanded. When floors may be subjected to moisture, use an APA approved exterior grade plywood.

Other wood subfloor materials, such as CDX, OSB, lauan, particleboard, chipboard, fiberboard or cementitious tile backer boards, are not acceptable substrates. Do not use preservative-treated and fire-retardant plywood, as some may be manufactured with resins or adhesives that may cause discoloration or staining of the flooring. Do not install flooring directly over solid or engineered hardwood flooring without first installing plywood or a suitable cementitious repair product at a minimum thickness of 1/4" over the hardwood flooring.

Wood subfloor deflection, movement, or instability may cause the flooring installations to release, buckle or deform. As such, do not use a plastic or resin filler to patch cracks. Do not use cement or rosin coated nails and staples or solvent-based construction adhesives to adhere the plywood. Do not install resilient flooring directly over a sleeper system (wood subfloor over concrete) or Sturd-I-Floor panels.

RESINOUS SUBSTRATES

When installing directly over a resinous products, such as an epoxy coating, ensure the coating is dry to the touch and has cured for the prescribed length of time. Substrate must be clean, dry, sound and free of contaminates. Be sure to follow adhesive installation procedures and trowel sizes for non-porous substrates. This may require abrasion of the resinous coating.

METAL SUBSTRATES

Metal substrates must be thoroughly sanded/ground to remove all residue, oil, rust and/or oxidation. Substrate must be smooth, flat and sound prior to installation. When installing in areas that may be subject to topical water, moisture and/or high humidity, an anti-corrosive coating should be applied to protect metal substrate. Contact a local paint or coating supplier for coating recommendations. Install flooring material within 12 hours after sanding/grinding to prevent re-

oxidation. Deflection in the metal floor can cause a bond failure between the adhesive and the metal substrate. Be sure to follow installation procedures and trowel sizes for non-porous substrates.

EXISTING FLOORING SUBSTRATES

Do not install over existing flooring substrates without fully isolating the existing flooring with approved plywood, underlayments, patches or repair products.

RADIANT HEATING SUBSTRATES

When installing flooring over a substrate that contains a radiant heating system, ensure the radiant heat is no higher than 70° F (21° C) 48 hours prior to and during the entire installation. 48 hours after installation, the radiant heat may be gradually increased over the course of 24 hours, until normal operating temperature is reached. Ensure the temperature of the radiant heating system does not exceed 85° F (29.5° C) and avoid making abrupt changes in radiant heating temperature.

SOUND CONTROL SUBSTRATES

Do not install REVV or VEXX over sound control mats or underlayments, including foam, recycled rubber and/or cork-based products.

For more information, please see the AVA Sound Control technical bulletin.

4. CONSTRUCTION JOINTS & CRACKS

All cracks, construction joints and other voids, as well as the areas surrounding them, must be clean and free of dust, dirt, debris and contaminants. All minor cracks 3/64" wide or less must be repaired with a compatible cementitious patch.

Due to the dynamic nature of concrete, manufacturer cannot warranty installations directly over construction joints (such as control cuts or saw joints), expansion joints, cracks or other voids wider than 3/64". Construction joints, expansion joints or cracks wider than 3/64" must have a suitable crack repair or joint repair system installed per the below recommendations.

All expansion joints should have a suitable expansion joint covering system installed to allow for expansion and contraction of

the joint. To treat expansion joints where an expansion joint covering system can't be installed or to treat through cracks (depth at least 75% of the thickness of the concrete), chase joint or crack with a suitable saw or grinder and open to a minimum width of 1/4". Be sure to clean all dust, dirt and debris from crack. Joints and cracks should then be sealed with a suitable, elastomeric caulk designed for use in expansion joints. Install a closed-cell backer rod at prescribed depth and follow all caulk manufacturer's instructions for installation. Ensure surface is troweled flush with surface of concrete.

To treat construction joints and surface cracks over 3/64", chase joint or void with a suitable saw or grinder and clean all dust, dirt and debris from crack. Fill entire crack with a rigid crack treatment designed for use in construction joints or cracks. Follow material manufacturer's instructions for installation. Ensure surface is troweled flush with surface of concrete.

Consult a project engineer or architect prior to treating cracks or joints, especially those that may affect structural integrity (such as expansion joints). Review all manufacturer installation instructions and/or consult manufacturer technical staff for all crack or joint filling products prior to treating construction joints and cracks.

5. SHEET PREPARATION

Ensure substrate is clean, dry, flat, sound and suitably prepared prior to installation, as manufacturer is not responsible for substrates that have not been properly prepared and tested for moisture.

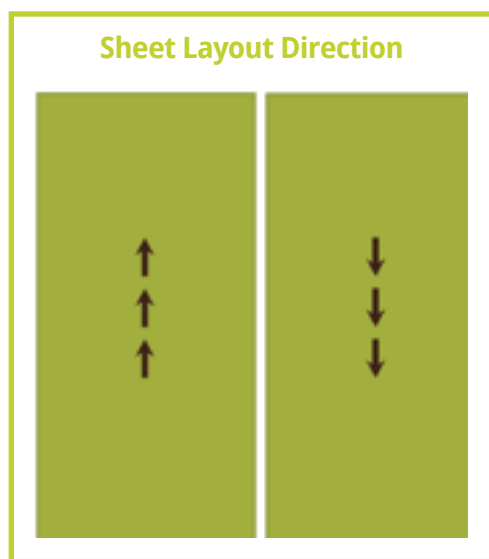
Ensure rolls are stored upright, with the cap-end down, to prevent distortion and compression of the material. Use an infrared thermometer to ensure the temperature of the material is within the installation condition requirements.

Prior to installation, confirm material installation pattern and direction per design specifications or work order. Inspect all mater prior to and during installation to verify that there are no

visible defects, damages or excessive shading variations. Avoid blending materials from different lots within the same room, as minor variations in color, texture or sheen may occur. Some flooring products, colors and textures have latent and acceptable color and shade variations. If there are concerns regarding shade or color variation, do not install material and consult a sales representative and manufacturer's technical staff. **Material installed with obvious visual defects will not be covered under warranty.**

Find the center of the installation area and square the area using the 3-4-5 squaring rule or similar method to aid in establishing an installation starting line. Do not overlap flooring seams with any seams in the substrate.

Once seam location is established, layout and rough cut sheets from the roll - allow for 3" - 6" of excess material. Rolls should be laid out and installed in sequence, following the numeric order of the rolls. When cutting sheets from a roll, be sure to turn every other sheet by 180° so that sheets are alternating in direction.



Overlap seams by at least 3/4" per edge, accounting for designs that may require pattern-matching. For larger installation areas where head seams will be created, ensure head seams are staggered by 3' - 4', depending on room size and sheet length. Material that has been cut towards the inside end of the roll may

retain some roll memory - when visible, back-roll the ends of the affected sheet to ensure the material lays flat during installation.

6. SEAM TRIMMING & CUTTING

Prior to final installation and heat-welding, the edge of each sheet must be trimmed by 1/2". Using a utility knife and a straight edge or a selvage edge trimmer, trim the bottom sheet to create a clean, straight edge. Ensure that knife blades are sharp, straight and vertical and avoid stretching or shifting material while trimming.

Once the bottom sheet is trimmed, use a hinge scribe or selvage edge trimmer to scribe and cut the top sheet. Once trimmed, remove scrap and check the seam - seams should be tight, but not over-compressed. Leave at least one seam un-trimmed so that adjustments can be made during installation, if needed.

When working in smaller areas, perimeter sheets, ends, borders and other specialty pieces can be cut prior to apply adhesive to fit snugly against or around walls, thresholds, transition strips, fixtures and other protrusions or accessories. Avoid forcing material tightly against vertical surfaces, as material may buckle. For larger installations, wait until adhesive installation

7. SHEET INSTALLATION

Ensure adhesive is approved for use with flooring material and the proper trowel type and size is used, as manufacturer is not responsible for all adhesion issues related to improper adhesive selection or usage.

Once all but the final seams have been cut, carefully fold back half of material and clean the substrate again prior to adhesive application. Apply adhesive according to instructions for specific product in use. When necessary, use weights (such as unused adhesive pails) to hold material back while adhesive flashes. Pay close attention to flash times and working times in order to avoid installing into adhesive that is too wet or dry.

Once adhesive has been applied and

flashed, carefully roll material back into the adhesive to avoid trapping air between the adhesive bed and the material. Leave a 1/64" (0.4 mm) gap between sheets, in order to create a path for the heat-weld grooving tool wheel to follow. Do not exceed gap width to prevent issues with seam integrity and strength.

Roll installation area with a 3 section, 100 lb. roller within 15 minutes of installation, crossing in a perpendicular direction after initial roll. Re-roll material 30-60 minutes after initial roll. Proceed with the installation in this manner for all remaining sheets, taking special care to ensure there is no adhesive overlap. Replace trowels and applicators at recommended intervals to maintain proper trowel ridge and spread rate.

If adhesive is oozing out of seams or material is shifting excessively, adhesive may be too wet for installation. Review open times and allow adhesive to flash longer prior to installing material into adhesive. Clean excessive adhesive or adhesive residue from the surface of the material according to the adhesive's cleaning instructions.

When installing into adhesive using a wet-set method, avoid walking or working on material until adhesive has cured for light foot traffic. Working on material that is installed into wet adhesive could cause adhesive to displace. When working off of material is not possible, use a kneeling board or equivalent to disperse weight evenly and prevent adhesive displacement.

To prevent movement, dust, dirt, debris and topical moisture in or around seams, use a multi-purpose masking tape intended for flooring and hard surfaces. If being installed in a wet area, seal the perimeter with a 100% silicone anti-microbial caulk.

8. FLASH-COVE INSTALLATION

When requested or required, sheet vinyl can be flash coved ≤ 6" up the wall. Flash-coving should only be attempted by installers with experience and/or training. Install an appropriate cove cap (1 1/8" radius) and cove stick according to the manufacturer's instructions, in order to protect the flooring edge and provide

a suitable radius for flashing. Ensure the cove stick is mitered at all corners and cut back at all doorways to provide a smooth transition.

While forming material to the desired radius, measure and cut the edge to meet the cove cap, ensuring material is snug and makes full contact with the cove stick. If the flash cove does not make full contact with cove stick, the material could become damaged over time.

Pattern scribe and cut all difficult fill pieces prior to spreading adhesive. Use the Boot / Mitered Outside Corner method or Butterfly method for creating outside corners. The boot should extend back on the least visible wall at least several inches from the corner. When cutting, avoid damaging all adjacent floor covering and any folded back material.

Use a 3" reinforced double-sided tape to adhere material directly to the cove stick and to the wall and roll with a weighted hand roller.

9. HEAT-WELDING INSTRUCTIONS

Prior to cutting heat-welding groove, ensure the gap between seams is free of adhesive, dust, dirt, debris and contaminants. Set the groove depth of the electric groover or hand groover to 66% of the total thickness of the material (1/16" or 1.5mm for 2.3mm), in order to create a ~1/8" (3.5mm) wide groove. Be sure to test groover on scrap material to ensure proper depth is achieved.

While grooving, ensure removal is split between each side of the sheet (50% per side) and replace blades when needed. Hand-grooving may be required near walls, fixtures, flash-coving and other vertical surfaces. Remove any and all loose pieces of flooring as well as any other dirt or debris from groove prior to welding.

All seams must be heat welded according to ASTM F1516. Ensure that adhesive has cured for recommended period of time prior to heat-welding, allowing at least 24 hours after installation. Prior to heat-welding, perform a test weld on scrap material that is bonded to a substrate to ensure the temperature and speed are correct. Welding should be performed

with a hot air welding gun set to 600-650°F (315-350 °C), using a 5 mm weld rod speed nozzle with a narrow heel.

Once the speed and temperature are confirmed, weld each seam and immediately trim using a quarter-moon spatula knife and trim plate or a Mozart trimming knife with a 0.7mm spacer. While welding, ensure that the welding flow or wash is present on both sides of the applied welding rod and that the nozzle is directly over the gap - avoid leaning the nozzle to one side. Do not allow foot traffic or trim welding bead until welding bead has completely cooled (at least 15 minutes).

After the weld has cooled, use a clean quarter-moon spatula knife with a clean trim plate or a Mozart trimming knife without the spacer to finish trimming the weld. The finished weld must be smooth and flush with the surface of the floor covering.

The weld may be glazed after the final trim in order to reduce maintenance. To glaze the weld, use a hot air welding gun to melt the surface of the trimmed weld rod until glossy, then allow it to cool. While glazing, do not touch the flooring or weld with the hot nozzle to avoid damage. Document finished welds via photograph or video to confirm proper completion.

10. INITIAL MAINTENANCE

Ensure that adhesive has cured for recommended period of time prior to conducting initial maintenance. Remove all protective coverings prior to cleaning. Sweep, dust mop and/or vacuum flooring to remove all dirt, dust or debris.

Mix a pH neutral, film-free and streak-free cleaner (such as the Hilway Direct Neutral Cleaner) with clean, potable water at an initial cleaning dilution ratio (~1:20 - 1:40 ratio). Use a clean microfiber mop or equivalent to damp mop flooring installation and allow cleaning solution to stand on material for 5-10 minutes. Avoid wet mopping, puddling or pooling cleaning liquid on material.

For heavily soiled floors, Use a low-speed (180 - 360 RPM) single swing disc scrubber with a 3M 4100 White Polishing

Pad or an auto-scrubber with 3M 5100 Red Cleaning pads to scrub the floor while wet.

Use a wet vacuum or clean mop to remove all excess cleaning solution. Rinse area with clean, cool water and ensure that all cleaning residue has been removed (this may require additional rinsing). Allow area to dry completely before allowing foot traffic.

Do not use detergents, abrasive cleaners or "mop and shine" type products, as they will dull the finish and sheen of the flooring material. Do not use vacuums that have a beater bar, electric brooms with hard plastic bottoms or no padding and vacuums which have a rubber bumper, as this may cause discoloration, scratching or loss of sheen.

For further information regarding daily or routine maintenance, please consult the product care & maintenance document or the associated product technical data sheet.

11. FLOORING PROTECTION

Protect newly installed flooring with construction grade paper or protective boards, such as Masonite or Ram Board, to protect flooring from damage by other trades. Do not slide or drag pallets or heavy equipment across the new flooring. Limit usage and foot traffic according to the adhesive's requirements. When moving appliances or heavy furniture, protect flooring from scuffing and tearing using temporary floor protection.

All furniture casters or glides must be intended for resilient flooring and made of a soft material (such as a rubber or poly-based material). Casters and glides must have a flat contact point that is at least 1 sq. in. or 1.125 in. in diameter to limit indentation and flooring or finish damage. All rolling seating in desk areas must have a resilient flooring chair pad installed over the finished floor to protect floor covering.

All fixed furniture legs or corners must have permanent felt or soft rubber floor protectors installed on all contact points to reduce indentation, wear, scratching and other flooring or finish damage. Floor protectors must have a flat contact point of at least 1 sq. in. or 1.125 in. diameter and must cover the entire bottom surface of the furniture leg.

Ensure all furniture castors and chair legs are clean and free of all dirt and debris. Routinely clean chair castors and furniture legs to ensure that dirt or debris has not built up or become embedded in castors or floor protectors. Replace chair castors and floor protectors at regular intervals, especially if they become damaged or heavily soiled.

Place walk-off mats at outside entrances. Prevent water and moisture from accumulating underneath walk-off mats. Ensure mats are manufactured with non-staining backs to prevent discoloration.

12. WARRANTY

AVA provides a Limited 12 Year Commercial Warranty for all VEXX and REVV flooring products. For additional information, see associated warranty documents.

FOR PROFESSIONAL USE ONLY. PLEASE CAREFULLY REVIEW ALL ASSOCIATED TECHNICAL DATA SHEETS, SAFETY DATA SHEETS, MAINTENANCE DOCUMENTS AND WARRANTY INFORMATION PRIOR TO INSTALLATION.