Objective and Overview

This plan outlines the guidelines and procedures for the remediation of homes with basements containing TJI® Joists with Flak Jacket® Protection manufactured after December 1, 2016 (“affected homes”). While the primary remediation component is a field applied paint, there are several steps that may be required prior to the application of the paint. This document details procedures for site preparation, field paint application, post application, and basement restoration.

Product Description

Effectiveness

A remedial paint, known as ‘W20115 Field Paint’, has been developed that can be applied over the top of the Flak Jacket coating. This latex based paint includes a compound that permanently binds formaldehyde to significantly reduce emissions. While there are no residential emissions standards for engineered wood products such as TJI® Joists with Flak Jacket® protection, independent laboratory tests of this field paint have shown a reduction in formaldehyde emissions from samples of TJI® Joists with Flak Jacket® coating down to a level below 50 parts per billion (“ppb”) based on ASTM D6007 small chamber test. This level is at or below existing California Air Resources Board standard for medium density fiberboard.

Safety

This document contains safety recommendations specifically related to the hazards posed by the application of the remediation paint. In addition, builders and remediation contractors are required to follow OSHA builder and contractor construction safety requirements which are not included in this document.

Before beginning work in the basement, refer to the attached Ventilation Protocol for Basement Work for Weyerhaeuser Remediation Contractors (Ventilation Guidelines).

The field paint is water-based, contains low-toxicity ingredients and no heavy metals. Despite the paint’s low inherent toxicity, it can be irritating to the eyes, respiratory system and skin. The attached Safety Data Sheet for the “W20115” field paint should be reviewed with workers prior to paint exposure as part of the employer’s Hazard Communication program in accordance with OSHA regulation 29CFR 1910.1200.

The paragraph below only applies for protection against paint mists, NOT if respiratory protection is used for formaldehyde. If respiratory protection is used for formaldehyde during painting, see the Ventilation and Respiratory Protection guideline attached and do NOT use the respiratory protection discussed in this section.
Workers who are required to wear respirators, which includes dust masks, must be enrolled in the employer’s respiratory protection program in accordance with OSHA Respiratory Protection Standard 29CFR 1910.134.

The volume of spray painting may generate significant quantities of airborne paint mist. Therefore, the spray applicator should wear tight fitting safety glasses or goggles and a NIOSH approved half-face respirator equipped with a N95, N99 or N100 particulate filter. For comfort and sustained fit an elastomeric (rubber, silicone) facepiece unit with attached filters is recommended for the applicator. However, a properly worn dual strap NIOSH approved N95, N99 or N100 disposable filtering facepiece respirator (“dust mask”) can also be worn. Dust masks that include an exhalation valve make breathing effort easier. Dust masks should be replaced when breathing resistance is experienced or daily. Filters should be replaced when breathing resistance is experienced or daily. For others who must work in the basement during paint application a NIOSH approved N95, N99 or N100 disposable filtering facepiece respirator (“dust mask”) is suggested especially if there is noticeable haziness in the air.

To minimize skin contact, the applicator should wear gloves (e.g., disposable nitrile style gloves) and a Tyvek type disposable suit unless high heat or humidity makes use impractical. The back of the suit can be slashed with a utility knife before use to provide ventilation and heat release. Workers who may be exposed to direct contact with the paint such as mixing and loading application system should avoid skin and eye contact and use safety glasses, gloves and a disposable suit if temperatures allow.

**Compatibility**

Tests have shown that the W20115 Field Paint has low corrosion potential when applied to steel. The paint contains no solvents, and based on its composition, is not expected to adversely interact with plastic hoses, electrical wiring or other common materials that might be installed on or adjacent to joists. The W20115 is highly compatible with wood.

**Warranty & Fire Performance**

The W20115 Field Paint does not alter the general warranty applicable to TJI Joist products or reduce the fire endurance of the TJI Joists with Flak Jacket protection. The TJI joists will continue to meet the fire requirements of section R501.3 of the 2012 IRC and section R302.13 of the 2015 IRC.

**Section 1 – Site Preparation**

1. The remediation contractor shall install mechanical ventilation as outlined in the attached Ventilation Guidelines.
2. The remediation contractor shall take appropriate steps to ensure the security of the home and contents for the duration of the work.
3. Homeowner items located in the basement shall be properly removed and stored if unless the remediation contractor and homeowner both agree that the work can be done without removal.
4. Contractor shall protect remaining basement contents and surfaces (walls, floors, HVAC systems, etc.) by covering with plastic film or tarp.
5. For a finished or partially finished basement, all ceiling drywall material must be removed to fully expose the joists. It may also be necessary to remove trim, lights, and other fixtures to allow removal of the drywall.
6. The contractor shall remove obstructions as required to allow the remediation paint to be applied to at least 98% of the total exposed web surface area of the joists. Unpainted web surface areas properly sealed per the attached Special Framing Conditions Details (Appendix F) are not considered exposed. Obstructions may include ductwork, insulation, mechanical components or pipes. Items that are not preventing the paint application do not have to be removed for remediation purposes. Builder or homeowner may require removal or masking of additional components for other purposes.

7. Contractor shall isolate the basement from the rest of the home by conducting the following steps:
   a. Turn off the HVAC system
   b. Cover any HVAC returns and registers in the basement
   c. Continuously operate the mechanical ventilation outlined in the attached Ventilation Guidelines during the duration of the work and as required for post-remediation ventilation.

8. Contractor shall take steps to seal off framing conditions which prevent access to Flak Jacket coated web surfaces. This can be done by using 3/8" OSB, solid sawn lumber, caulk or foaming polyurethane. Typical details are shown in the Special Framing Conditions Details.
   a. Special conditions to be addressed include such things as double joists (tight and gapped conditions), double joist penetrations and ends, TJI joists as rim, and cantilevered joists.
   b. When caulk is specified in the details, it shall be NR4000 Siliconized Acrylic Latex Caulk (Sherwin-Williams), Alex Plus Acrylic Latex Caulk Plus Silicone by Dap Products Inc., or GE5040 Supreme Silicone Caulk by Momentive.
   c. When foaming polyurethane is specified in the details, it shall be Great Stuff Gaps & Cracks Insulating Foam Sealant by Dow Chemical Company.

9. Verify on the I-Joist Remediation Form that all Site Preparation tasks are completed.

Section 2 – Field Paint Application

1. Ensure continuation of mechanical ventilation during the paint application.

2. All TJI Joists with Flak Jacket protection produced after December 1, 2016 (Gen 4) shall be coated. This includes joists used as blocking panels.

3. W20115 Field Paint will be applied by use of equipment that is designed for high-viscosity paints that contain aggregate. Graco Texspray Mark 4 and the Graco Texspray Mark 5 units using a Graco Rac 5 315 tip have been used to successfully apply the field paint. Other equipment and spray tips designed for the requirements stated above may also be used.

4. The W20115 should be inspected upon opening a pail. If no separation is observed, then the paint should not be stirred. If separation is observed, then stirring should be gentle and limited in duration to that required to achieve a homogenous mixture. Mechanical mixing is not permitted. Excessive stirring can damage the paint and should be avoided.
5. Paint shall be applied in multiple passes on all TJI Gen-4 Flak Jacket Coatings to ensure a coverage of at least 18 wet mils. The 18 wet mils will generally ensure full coverage TJI Gen-4 Flak Jacket Coating and black product labeling/stamps when dry. Multiple coats may require multiple measurements adding up to at least 18 wet mils. Thickness verification shall be made using both of the following methods:
   a. Wet mil gauge at least once for every 100 ft² of ceiling area.
   b. Verify no green Flak Jacket coating or black letters or other stamps/labeling are visible on the web after the paint has dried. Coating depth inconsistencies may result in markings becoming visible when the paint has dried. Therefore, before removing protective coverings on the jobsite Weyerhaeuser suggests shining a flashlight or other lighting to ensure no Flak Jacket coating or black markings are visible through the dried paint. If black lettering is visible additional paint may need to be applied. (See image below).

   ![Appearance of Flak Jacket 2-Hours after Application of W20115 Field Paint](image)

6. At 18 wet mils or more, as evidenced by visual inspection, paint shall be applied to at least 98% of the total exposed web surface area. Unpainted web surface areas properly sealed per the attached Special Framing Condition Details are considered properly treated. To calculate, identify the non-remediated Gen-4 lft divided by total joist lft. If < 2%, the home is remediated. If < 2%, the home is remediated. If the amount is > 2%, then remove ventilation or other mechanical, electrical or plumbing and treat exposed area with paint to achieve < 2%. Refer to the Remediation form attached.

7. Difficult to access areas may require the use of specialized spray heads or different application techniques like a roller or brush.

8. Paint shall be applied in accordance with the attached paint label.

9. Paint will be targeted for application to the green Gen-4 Flak Jacket coating on the joists. Overspray on the joist flange or applying paint to the subfloor is allowed, but not required. Note: The non Flak Jacket treated wood has exceptionally high absorption for the W20115 paint so painters should expect to apply unusually high level of paint in these regions to achieve uniform appearance. Multiple coats may be required.

10. Painting of Flak Jacket joists produced prior to December 1, 2016 (Gen-2) is allowed, but not required. If the W20115 is being applied, it should be limited to an application level of 3 to 5 wet mils. The W20115 is expected to adhere well to the Gen-2 coating so no primer or special prep should be required.

11. The exact amount of paint used will depend largely on the transfer efficiency of the spray system and the size of the basement.
12. Verify on the I-Joist Remediation Form that all Field Paint Application tasks are completed.

13. No conventional house paint should be applied over the Flak Jacket prior to the completion of remediation and inspection. Apply only prescribed W20115 Field Paint during the remediation process.

Section 3 - Post Application

1. Fill out a Remediation Tag and place it on a treated joist somewhere near the main HVAC unit.
2. Continue mechanical ventilation for a minimum of 48 hours after the painting is completed.
3. In addition to #2 above, provide natural ventilation to the upper floors by opening doors and windows to the greatest extent feasible.
4. Verify on the I-Joist Remediation Form that all Post Application tasks are complete and submit to Weyerhaeuser and builder or homeowner.

Section 4 – Basement Restoration

1. During this period, provide natural ventilation to the upper floors by opening doors and windows to the greatest extent feasible.
2. Re-install any duct work, pipes, mechanical components that were removed during the remediation.
3. For finished or partially finished basement, re-install drywall, paint surface & lights.
5. Return any homeowner contents that were removed.
6. Note: Once remediation and formal inspection are complete, homeowner can at their own discretion after inspection, apply alternative paint colors to the remediated joists/whole house floor system.
Ventilation Protocol for Basement Work for Weyerhaeuser Remediation Contractors
(Appendix B)

This protocol is intended to assist Weyerhaeuser’s remediation contractors comply with the OSHA Formaldehyde Standard and for worker protection given the potential presence of airborne formaldehyde. This plan may be updated as additional data and experience is obtained.

Step 1: Pre-Remediation: Natural Ventilation

The first step is to maximize natural ventilation if not already in place by briefly entering the basement and immediately opening all available windows and, if present, basement doors to the exterior.

The door to the main level should be kept closed until the mechanical ventilation is running.

Leave the basement once this step is done and mobilize for the remediation work.

Wait at least 1 hour before re-entering basement after opening windows unless they were already open.

Step 2: Pre-Remediation: Mechanical Ventilation

Install and operate temporary mechanical ventilation with a flow rate of 0.4 cubic feet per minute per square feet of floor area (cfm/ft²). Example: for a 1500 square foot basement, get fan capacity of (1500 ft² x 0.4 = 600 CFM capacity).

The exhaust duct should be sealed into a basement window and directed:
(1) away from areas where people may congregate (i.e., deck, patio, play area), and
(2) to ensure that air exhausted from the basement does not re-enter the home. If necessary, flexible duct can be used to convey the exhaust air to a location where it can be discharged away from people and to prevent re-entry into the home.

Sufficient make-up air must be provided through a minimum of four square feet of opening to either the outdoors (i.e., basement windows or door) or an interior door (i.e., top of the basement stairs). If an interior door is the only source of make-up air, then the door should be removed to prevent closure and to provide adequate continuous supply of make-up air to the basement. This is critical to prevent back drafting of water heaters, furnaces, clothes dryer, or other combustion appliances. For safety, barricade tape and a temporary, portable gate should be installed in the doorway to prevent unauthorized access to the basement.

After providing adequate make-up air, doors and windows that are not integral to the mechanical ventilation plan can be closed for security or other purposes.

If there are return registers or vents in the basement on the home’s HVAC system, they should be shut and sealed with plastic and/or duct tape. The supply air can be used as make up for the exhaust.

Any doorways that segregate portions of the basement (e.g., unfinished from finished sections) should be opened completely to allow air to migrate freely throughout the basement. Box fans can be positioned on the floor in the segregated spaces as necessary to move air toward the exhaust fan and promote mixing.
**Ventilation Equipment and Use**

An exhaust fan (“negative air machine”) capable of meeting the required volumetric airflow, consistent with the recommendation above should be used. HEPA-filtered exhaust fans typically used during abatement of lead and asbestos are readily available and should be suitable for the mechanical ventilation requirements described above (HEPA Filtered Negative Air Machine, Note: the HEPA filter is NOT a requirement for this application).

We recommend that only new units be used to avoid any potential cross-contamination from prior use in a hazardous environment. Alternatively, a window mounted unit can be purchased and installed in a basement window (e.g., Canarm Wall Exhaust Fan — Model# S10-B2).

The fan unit should be positioned to move air across the basement from open windows on one wall across the basement where it is exhausted on the opposite wall, if possible. Avoid instances where air can “short circuit” and enter a window close to the fan exhaust location which will reduce the “pull” across the basement and result in reduced overall ventilation efficiency.

The basement should always be kept under negative pressure. This can be checked using a smoke tube near a narrow opening into the basement such as a cracked open door or window; holding a piece of tissue paper letting it drape downwards at the same locations; or seeing if a door closes on its own towards the basement are some methods.

**Ventilation Times and Work Practices**

- **Mechanically Ventilate for at least 2 hours before beginning planned work.**
- Minimize the time workers spend in the basement before there's been 2 hours of mechanical ventilation
- Take breaks outdoors.
- Leave the basement if workers experience noticeable irritation or other difficulties.

**Ventilation After Remediation in Preparation for Air Sampling and Occupancy**

- Continue to run the mechanical ventilation during the abatement work and for at least 2 days after the last day of paint application work
- During the 2 days of mechanical ventilation after remediation, maximize natural ventilation in the upper floors to the greatest extent possible by opening windows and doors. Open interior doors as well to promote air flow. Weather, security and occupant concerns must be considered.
- If operational, the HVAC system should be run during this period in normal mode.
- Windows and doors need to be closed after the mechanical ventilation period is complete for at least 24 hours in preparation for air sampling. Continue to run the HVAC system in normal mode if operational.
- If homes have operational Energy Recovery Ventilation (ERV) units, these should be set at 50% fresh air setting throughout the post-remediation and air sampling stages.
**W20115 FIELD PAINT**

**DESCRIPTION:** W20115 is a proprietary, grey-colored paint that is intended to be applied over the current green Flak Jacket® coating on Trus Joist® TJI® joists with Flak Jacket® protection (manufactured after December 1, 2016). The W20115 is expected to be applied on TJI® joists in basement applications. It has been specifically designed to be sprayed onto vertical I-joint webs at a level of 18 wet mils without dripping. The paint chemically binds formaldehyde emissions from the green Flak Jacket® coating.

W20115 paint is water-based, contains low toxicity ingredients, less than 0.01% VOC’s, and no heavy metals. Packaging is currently available in 5-gallon pails.

**DIRECTIONS:** Upon opening 5-gallon pails of W20115 no separation in the paint should be observed and no sediment should exist on the bottom. In the unlikely event that either of these conditions exist, then manual stirring can be used to achieve a uniform mixture. Avoid over-stirring and do not stir unless separation or sedimentation exist.

W20115 should be applied directly to the green Flak Jacket® coating on the web portion (both sides) of TJI® joists with Flak Jacket® protection (manufactured after December 1, 2016). W20115 can be applied by use of brushes, rollers or spray equipment. The application level must be 50 g/ft² (about 18 wet mils or greater). Correct application level should be checked by use of a gauge immediately after treatment. It is permissible to achieve the correct application level by use of multiple coats.

The W20115 has a grey color with a specific level of ‘hide’ or opacity. If green Flak Jacket® coating or black lettering are still visible after treatment with W20115, then additional W20115 should be applied until no green Flak Jacket® color or black lettering can be seen.

Formaldehyde emissions from the Flak Jacket® coating should be reduced substantially within 24 hours of treatment when W20115 is applied at the correct application level. Basements should be ventilated after treatment with W20115 for a period of 2 days or more prior to resuming typical user activities.

**CLEANUP:** Equipment used to apply the W20115 can be cleaned with water. Do not use mineral spirits or other solvents to clean equipment. Spilled W20115 should be contained and removed with an inert absorbent. Mixtures of absorbent and dried W20115 should be disposed in accordance with all local, state and federal regulations.

**CAUTION:** W20115 must be applied to Flak Jacket coating with adequate ventilation, especially when spraying. Basements must be well ventilated during and after application of the W20115, especially in spray applications. As with any sprayed water-based house paint, use of respiratory protection in accordance with OSHA requirements during application should be considered depending on the effectiveness of ventilation. Applied W20115 can have an odor that is similar to that of conventional house latex paint. This odor might persist for a period of 2 days. Refer to the W20115 Safety Data Sheet.
## Section 01: Chemical Product and Company Identification

| Manufacturer     | Walker Emulsions Inc.  
|                  | 4401 SE Johnson Creek Blvd  
|                  | Portland, OR, USA 97222  
|                  | 503-659-1708  
| Supplier         | As above  
| Prepared By      | Walker Emulsions Inc. - Environmental Department  
|                  | Portland: Steven M. Brown 503-659-1708  
| Preparation Date | 07/13/2017  
| Revision Date    | 07/13/2017  
| Product Name     | W20115  
| Product Number   | 113566  
| CAS Number       | Mixture  
| EPA Registration | N/A  
| Chemical Family  | Mixture  
| Chemical Formula | Not Applicable/Mixture  
| Material Use     | Proprietary  
| 24 Hour Emergency Number | Quantum Murray 1-877-378-7745 (Burlington, ON). Infotrac (800) 535-5053 (Portland, OR).  

## Section 02: Hazards Identification
Hazard Classification

Signal

Word: Hazards:

<table>
<thead>
<tr>
<th>Precaution Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H302</td>
<td>Harmful if swallowed. Acute toxicity, Category 4</td>
</tr>
<tr>
<td>H313</td>
<td>May be harmful in contact with skin. Acute toxicity, Category 5</td>
</tr>
<tr>
<td>H320</td>
<td>Causes eye irritation. Serious eye damage/eye irritation, Category 2B</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation. Specific target organ toxicity-single exposure, Category 3</td>
</tr>
</tbody>
</table>

Prevention:

<table>
<thead>
<tr>
<th>Precaution Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P102</td>
<td>Keep out of reach of children.</td>
</tr>
<tr>
<td>P202</td>
<td>Do not handle until all safety precautions have been read and understood.</td>
</tr>
<tr>
<td>P261</td>
<td>Avoid breathing dust/fume/gas/mist/vapours/spray.</td>
</tr>
</tbody>
</table>

Response:

<table>
<thead>
<tr>
<th>Precaution Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P262</td>
<td>Do not get in eyes, on skin, or on clothing.</td>
</tr>
<tr>
<td>P305 + P351 + P338</td>
<td>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</td>
</tr>
<tr>
<td>P337 + P313</td>
<td>If eye irritation persists: Get medical advice/attention.</td>
</tr>
<tr>
<td>P302 + P350</td>
<td>IF ON SKIN: Gently wash with plenty of soap and water.</td>
</tr>
<tr>
<td>P304 + P341</td>
<td>IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.</td>
</tr>
<tr>
<td>P342 + P313</td>
<td>If experiencing respiratory symptoms, get medical advice/attention.</td>
</tr>
<tr>
<td>P301 + P315 + P330</td>
<td>IF SWALLOWED: Get immediate medical advice/attention. Rinse mouth.</td>
</tr>
</tbody>
</table>

PRODUCT: W20115

Disposal:

Effects of Acute Exposure Eye Contact Ingestion Inhalation

Skin Absorption Skin Contact

Effects of Chronic Exposure Inhalation

Exposure Limits
Section 03: Composition and Information on Ingredients

Chemical Description
Aqueous latex paint with colorants and proprietary additives: 100%. The specific identity and exact percentages of ingredients are not specified as the mixture is a trade secret.

Non-controlled Product
THIS IS NOT A CONTROLLED PRODUCT UNDER W.H.M.I.S. (HPA Bill C-70). THIS IS NOT REGULATED BY DOT.

HMIS Rating (0-4)
HEALTH = 1; FIRE = 0; REACTIVITY = 0; PROTECTIVE EQUIPMENT = B

Section 04: First Aid Measures

Skin Contact
Flush skin with soap and water or use an approved waterless hand cleaner. If irritation persists, seek medical attention.

Inhalation
Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician promptly.

Ingestion
Induce vomiting. Dilute with large quantities of water or milk. Get immediate medical attention. Never give anything by mouth to an unconscious or convulsing person.

Eye Contact
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Consult physician if irritation continues.

Section 05: Fire and Explosion Data

Flash Point, Method
NAP

Auto Ignition Temperature
Not Available
PRODUCT: W20115

### Section 05: Fire and Explosion Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>LFL=NAP  UFL=NAP</td>
</tr>
<tr>
<td>Upper Flammable Limit (% vol)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Lower Flammable Limit (% vol)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Fire Hazards</td>
<td>Never use welding or cutting torch on or near drum or container, even empty, because product or residues can potentially ignite explosively.</td>
</tr>
<tr>
<td>Explosion Hazards</td>
<td>Not Available</td>
</tr>
<tr>
<td>Hazardous Combustion Products</td>
<td>Carbon Dioxide, Carbon Monoxide</td>
</tr>
<tr>
<td>Explosive Range:</td>
<td>Not Available</td>
</tr>
<tr>
<td>Extinguishing Media</td>
<td>Treat as an oil fire. Use dry chemical, chemical foam, or carbon dioxide.</td>
</tr>
<tr>
<td>Fire Fighting Media and Instructions</td>
<td>Use self-contained breathing apparatus with full facepiece.</td>
</tr>
<tr>
<td>Sensitivity to Mechanical Impact</td>
<td>NAP</td>
</tr>
<tr>
<td>Sensitivity to Static Discharge</td>
<td>NAP</td>
</tr>
<tr>
<td>Additional Information</td>
<td>NFPA Rating (Scale 0-4): Health:0, Fire:0, Reactivity:0</td>
</tr>
</tbody>
</table>

### Section 07: Handling and Storage

**Handling**

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues, (vapor, liquid, and/or solid), all hazard precautions given in this data sheet should be observed.

**Storage Needs**

PROTECT FROM FREEZING. Store above 40°F. Frozen product may be irreversibly damaged. Keep container closed when not using. Agitate before using.

### Section 08: Exposure Control and Personal Protection

**Protective Equipment**

- **Eye/Type**: Wear approved splashproof chemical goggles.
- **Respiratory/Type**: If exposure exceeds the Threshold Limit Values listed in Section II, then use a NIOSH-approved respirator to prevent overexposure in accordance with 29 CFR 910.134.
- **Gloves/Type**: None normally required.
- **Clothing/Type**: Suitable for splash protection (long sleeves, rubber apron). Avoid contact with clothing, dried product may be irremovable.
- **Ventilation Requirements**: Special ventilation procedures not normally required.
- **Occupational Exposure Limits**: None normally required.
**PRODUCT:**  W20115

### Section 09: Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Grey</td>
</tr>
<tr>
<td>Viscosity (cPs, water=1)</td>
<td>5000 - 7000 CPS #4 spindle @ 20</td>
</tr>
<tr>
<td>Volatility (wt%)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Volatility (vol%)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.092437</td>
</tr>
<tr>
<td>pH</td>
<td>8.3 - 9.0</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>SOLUBLE</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild</td>
</tr>
<tr>
<td>Odor threshold (ppm)</td>
<td>Not Available</td>
</tr>
<tr>
<td>HAP</td>
<td>Not Available</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Vapor Density (air=1)</td>
<td>Non Volatile</td>
</tr>
<tr>
<td>Evaporation Rate (n-butyl acetate=1)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Coefficient of water/oil distribution</td>
<td>Not Available</td>
</tr>
<tr>
<td>Boiling Range</td>
<td>Not Available</td>
</tr>
<tr>
<td>Partition Coefficient</td>
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<tr>
<td>Freezing Point</td>
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<tr>
<td>Melting Point</td>
<td>Not Available</td>
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<tr>
<td>VOC</td>
<td>&lt; 0.01%</td>
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<td>Flash Point (TCC)</td>
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<tr>
<td>Molecular Weight</td>
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<td>Explosive limits</td>
<td>Not Available</td>
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<td>Flammability (solid, gas)</td>
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<tr>
<td>Auto-ignition temperature</td>
<td>Not Available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
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</table>

### Section 10: Stability and Reactivity Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous Polymerization</td>
<td>Will not occur</td>
</tr>
<tr>
<td>Chemical Stability</td>
<td>Stable</td>
</tr>
<tr>
<td>Stability</td>
<td>This product is stable.</td>
</tr>
<tr>
<td>Incompatibility</td>
<td>May react with strong oxidizing agents such as chlorates, nitrates, peroxides etc.</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>Acids, and strong oxidizing agents.</td>
</tr>
<tr>
<td>Reactivity Conditions</td>
<td>Not Available</td>
</tr>
<tr>
<td>Hazardous Products of Decomposition (thermal)</td>
<td>Thermal decomposition or burning may produce carbon monoxide and/or carbon dioxide.</td>
</tr>
</tbody>
</table>

### Section 11: Toxicological Information

**Routes of Entry**
Section 11: Toxicological Information

<table>
<thead>
<tr>
<th>Substance</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye LC/50</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>TWA</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>This product does not contain any substance(s) listed as a carcinogen by NTP, IARC, or OSHA.</td>
</tr>
<tr>
<td>Teratogenicity/Mutagenicity</td>
<td>Not Available</td>
</tr>
<tr>
<td>Reproductive Effects</td>
<td>Not Available</td>
</tr>
<tr>
<td>Synergistic Materials</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

Section 12: Ecological Information

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental</td>
<td>Not Available</td>
</tr>
<tr>
<td>Ectotoxicological Information</td>
<td>Aquatic toxicity data not available.</td>
</tr>
<tr>
<td>Biodegradability</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

Section 13: Disposal Considerations

- **EPA Hazardous Waste Number**: NONE
- **Waste Disposal**: Product must be disposed of properly under Federal/State regulations for industrial waste. This product when spilled or disposed of is a non-hazardous waste as defined in RCRA regulations (40 CFR 261). Solidified spills using an approved inert material might be disposed as special industrial waste at a sanitary landfill, pending local regulations.

Section 14: Transport Information

- **U.N. #**: None
- **T.D.G. Classification**: NA
- **D.O.T. Classification**: Not Hazardous
- **WHMIS Classification**: D2B

Section 15: Regulatory Information

- **EEC Classification**: Irritant
- **U.S. Federal Regulations**: This product is regulated by the EPA Clean Water Act. See Section VI.
- **US TSCA**: ALL Ingredients in this product are listed in the T.S.C.A. Inventory.
- **US State Regulations**:  
  - **California Prop 65**: None of the ingredients in this product is listed  
  - **New Jersey**: None of the ingredients in this product is listed  
  - **Pennsylvania**: None of the ingredients in this product is listed  
  - **SARA 313 Information**: None of the ingredients in this product is listed  
  - **SARA 311/312 Hazard**: Not hazardous  
  - **FDA**: NAP

Section 16: Other Information

Do not dilute or mix with other materials unless advised by supplier.

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information provided.
TJI® Joists with Flak Jacket® Protection Remediation Form – **All fields are required to be completed**

CCID: ___________________  Builder & Development: ______________________________

Location of Remediation:

<table>
<thead>
<tr>
<th>Address</th>
<th>Lot #</th>
<th>City</th>
<th>State</th>
<th>Zip</th>
</tr>
</thead>
</table>

Contractor Name: ___________________  Company: ______________________________

### Date of Paint Application

<table>
<thead>
<tr>
<th>Sq. Ft. of total basement</th>
</tr>
</thead>
</table>

### Gallons of Paint Applied

<table>
<thead>
<tr>
<th>Wet mil reading every 100 ft² ceiling surface area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of readings: __________</td>
</tr>
<tr>
<td>Confirm all wet mil readings were at min. 18 mils</td>
</tr>
<tr>
<td>Initial: __________</td>
</tr>
</tbody>
</table>

### Non-remediated Gen-4 LFT*:

- (if none, enter 0)
- Total LFT of all joists: __________

*Non-remediated Gen-4 is exposed and was not coated with field paint or encapsulated.

### Check List – Check off each box

- **Site Preparation**
- Ventilation/PPE
- Obstruction removal & masking
- HVAC off
- Caulk & Special Conditions

- **Field Paint Application**
- Wet mil readings
- Visual verification
- Fill out gallons used and lineal feet covered and uncovered

- **Post Application**
- Mechanical ventilation
- Complete & hang Remediation Tag
- Complete Remediation Form

---

Paint should be applied to at least 98% of the total exposed web surface area. Take the non-remediated Gen-4 LFT divided by total joist LFT. If < 2%, home is remediated. If not, remove ventilation or other mechanical, electrical and plumbing and treat exposed area with paint.

---

I hereby attest that, on the date and at the location indicated above, the TJI® Joists with Flak Jacket® Protection were fully remediated by applying a field coat in the manner specified by Weyerhaeuser.

Contractor Signature: ___________________  Date: __________

Printed Name: ___________________  Company: ______________________________
Detail 1
Tight Double TJI

Tight or max
1/4" gap

Remediation paint -18 wet mils minimum on sides of webs

Remediation paint. Apply after caulking to all flange surfaces 10 wet mils minimum

Caulk to fill gap between flanges
Detail 2
Gapped Double TJI

Spray remediation paint on subfloor and top flanges until it drips before installing OSB strip

Remediation paint. Apply after OSB strip and caulking to all flange surfaces and OSB strip
10 wet mils minimum

Remediation paint - 18 wet mils minimum on the sides of the webs

Caulk along the length of OSB strip

3/8” OSB strip (1” narrower than out-to-out of double flanges)

Glue and nail with 6d nail @ 12” oc into each flange

>1/4” gap

Weyerhaeuser Corporate Headquarters
220 Occidental Avenue South, Seattle, WA 98104
1-800-525-5440
Detail 3
Double to SCL Header or Rim

Double TJI per Detail 1 or 2

Caulk joint between double TJI and rim or beam prior to paint application

OSB strip for gapped double TJI (Detail 2)

Rim Board or beam

Weyerhaeuser Corporate Headquarters
220 Occidental Avenue South, Seattle, WA 98104
1-800-525-5440
Detail 4
Double TJI to I Joist Rim or Header

Double TJI
Per detail 1 or 2

TJI rim or header

Apply foaming polyurethane and or caulk to fill all gaps prior to paint application.

OSB strip for gapped double TJI (Detail 2)
Detail 5
Double Joist Penetrations & End Cap

Caulk gaps between end cap and double joists prior to painting

3/8" end cap glued and nailed w 6d nails into flanges to cap off end of double joists prior to painting. Paint end cap with remediation paint 10 wet mils minimum

Foaming polyurethane or caulk to be applied to all penetrations to fully seal prior to painting

OSB strip for gapped doubles (Detail 2)

Mechanical ductwork or pipes
Detail 6
TJI Rim Joist

Web hole

Glue & screw 3/8" OSB cap over any web holes or fill with foaming polyurethane before painting

TJI rim joist tight or gapped to outside of wall

Caulk joint at top and bottom flanges before painting

The future is growing
Detail 7
Cantilevered Joist

Remediation paint on sides of cantilevered joists, rim board, and both sides of blocking panel. 18 wet mils minimum

Cut hole if required in blocking panel (8"Ø max.)

Remediation paint applied @ 18 wet mils to both sides of web
Detail #8
Gapped Double TJ1 alternate

>1/4" gap

Remediation paint -18 mils wet minimum on the sides of the webs

Caulk along length of 2x strip

Remediation paint. Apply after 2x material is fitted into place. 10 mils wet minimum

2x Lumber ripped to "x" to fit snugly between double joist. Fasten with #8 x 2-1/2" wood screw at 12" o.c.