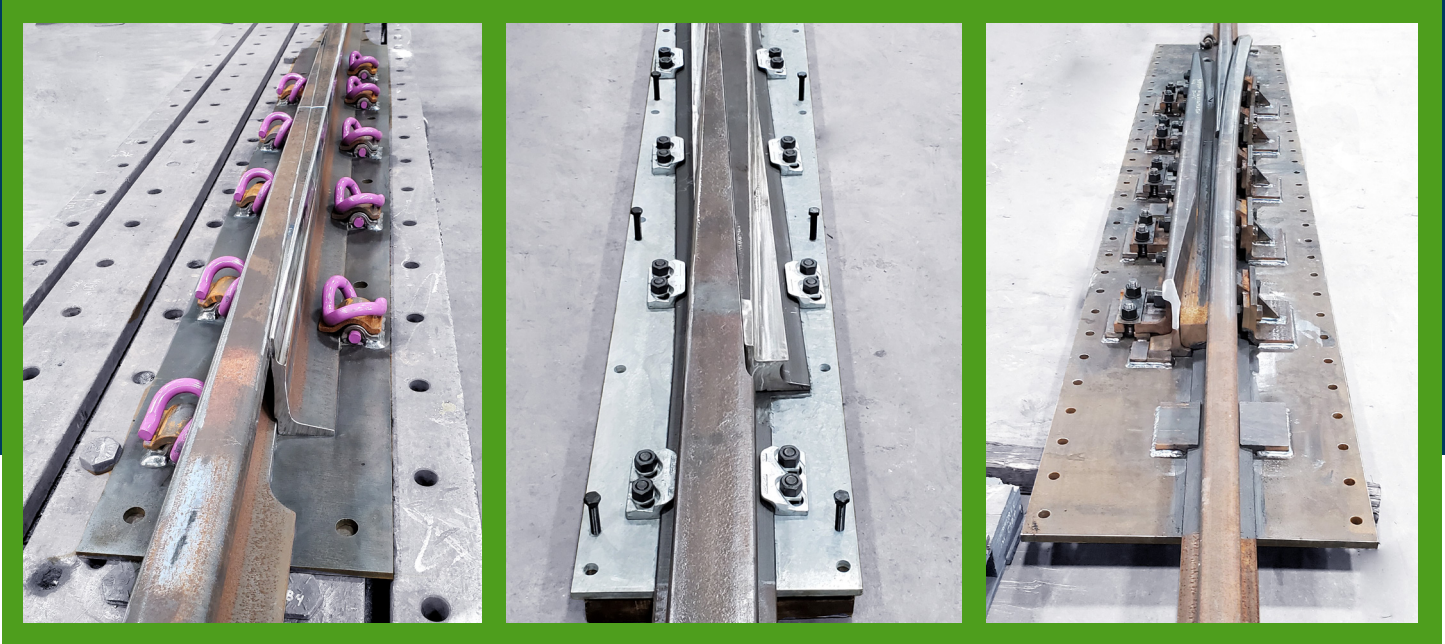


NEW GENERATION EXPANSION JOINTS



Atlantic Track manufactures all-rail design expansion joints for CWR installation.

Our product is designed, patented, and manufactured to allow the joints to take the strain of today's axle loads while compensating for up to 30" of thermal rail expansion and contraction.

Our design has proven to be a great insurance policy for protecting diamond crossings and other specialty trackwork.

Key Product Benefits:

- The new point design strengthens the point area to prevent chipping or breaking.
- When installed in pairs directly adjacent to one another, our joints are self-guarded. The tangent/straight version requires no speed restrictions.
- Able to accommodate both curved and tangent track.
- Self-Anchoring. No maintenance required. No lubrication required.
- CWR arrangement reduces excessive vibration allowing for heavier, faster trains.
- Continuous tread surface provides smooth, continuous wheel transfer.
- Reduces the potential for track buckling or pull apart.
- Interchangeable design installs easily within different rail systems, timber, steel or direct fixation.

MATERIAL SPECIFICATIONS AND RECOMMENDATIONS FOR ATLANTIC TRACK SLIDING JOINTS:

- Expansion Joints are to be manufactured from customer approved rail. (Head Hardened or Deep Head Hardened is recommended)
- Range of movement should be 15" + or – the neutral position. The neutral position of the slide rail is established at 60 deg. F.
- Slide/Friction Surface (guide blocks) should be constructed from wear resistant austenitic manganese ASTM A128.
- All friction surfaces to be coated with graphite dry film lubricant (shop applied).
- The rigid assembly is to be constructed utilizing customer compliant fastening and materials.
- All wheel contact surfaces are to utilize components that are modular and interchangeable. Wheel contact materials are to be fabricated from DHH or HH rail.
- Rail ends are to be blank (no end drilling) for CWR installation.

Installation Recommendations:

Device is shipped with sliding rail positioned at **neutral point with 15" gap** between end of sliding rail and integral rail stop. If the connecting rail is not installed at **mean temperature 60°**, an adjustment should be made thus positioning the sliding rail relevant to rail temperature at the time of installation.

Factors other than temperature to be considered:

- Length of track section to be accommodated or protected.
- Directional traffic patterns.
- Concrete shrinking rate at solidification/curing.
- Rail Expansion joints integral to an actual structures expansion joint or chord .
- Ballasted or open deck.
- Any electrical isolation or plate anchoring requirements.
- Vertical grade (Ascending/Descending)
- Breaking zones.
- Anchored or unanchored track.
- If track circuit bond wires are to be utilized a flexible loop should be provided to permit movement of the sliding rail during expansion, and contraction.

Maintenance Recommendations:

- It is recommended that **periodic grinding** take place to remove plastic flow from the tread/corner running rail tread surface, re-establishing a nominal radius after the work hardening is recommended to prevent spalling or potential fracturing.
- In addition, it could become necessary to **re-position** the slide rail to establish the nominal slide rail movement from the theoretical neutral position.

Distance from positive stop to the heel of the slide rail relative to "instantaneous" rail temperature F° (Prorated slide rail positioning)

NOTE: Denotes neutral position at 15" from heel of slide rail.

10° F = 22.5"	80° F = 13"
20° F = 19.25"	100° F = 10.75"
40° F = 17"	120° F = 7.25"
60° F = 15"	