Joints
Pourable/Cork Joint Seal
Pourable/Cork Joint Seal

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPOS</td>
<td>Pourable/Cork Joint Seal</td>
<td>m of Joint Seal</td>
</tr>
</tbody>
</table>

This element defines only those deck joints filled with a pourable or cork seal or asphaltic concrete plug seal including those under a flush seal or asphaltic concrete wearing surface and includes all of cold applied polymer joints.

For each of the condition states, report the estimated quantity in linear metres.

**Condition state descriptions**

<table>
<thead>
<tr>
<th>Condition State</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The element shows minimal deterioration. Adhesion is sound with no signs of leakage. There are no cohesion cracks. The adjacent deck and/or header is sound.</td>
</tr>
<tr>
<td>2</td>
<td>Minor fine adhesion and/or cohesion cracks may be present. Minor leakage may show underneath. Joint may be slightly impacted with debris. Minor spalls in deck and/or headers may be present adjacent to joint.</td>
</tr>
<tr>
<td>3</td>
<td>Moderate adhesion and/or cohesion cracks exist allowing reasonable leakage of moisture through the joint. Joint may be impacted with debris. Cracks or medium spalls in deck and/or headers may be present adjacent to joint.</td>
</tr>
<tr>
<td>4</td>
<td>The joints have failed allowing extensive moisture penetration. Joint sealant may be almost completely lost. Joint may be heavily impacted with debris and/or stones. Adjacent deck may be severely cracked or spalled.</td>
</tr>
</tbody>
</table>

**Key Areas to inspect** for any cracking, and other deterioration signs:

1. Joint and surrounding roadway
2. Deck underside for water leakage
3. Under footway slab and cavities
4. Extends up the kerb

**Rating Guidance Notes:**

Take the joint gap shown on drawings at the stated temperature to site when rating.
**Pourable/Cork Joint Seal**

**Condition State 1**

The element shows minimal deterioration. Adhesion is sound with no signs of leakage. There are no cohesion cracks. The adjacent deck and/or header is sound.

Joint in good condition.

Joint in good condition.
Pourable/Cork Joint Seal

**Condition State 2**

Minor fine adhesion and/or cohesion cracks may be present. Minor leakage may show underneath. Joint may be slightly impacted with debris. Minor spalls in deck and/or headers may be present adjacent to joint.

Joint with minor spalls not showing any major leakage under the bridge.

Asphaltic concrete above pourable joint is cracked indicating loss of adhesion
## Pourable/Cork Joint Seal

### Condition State 3
Moderate adhesion and/or cohesion cracks exist allowing reasonable leakage of moisture through the joint. Joint may be impacted with debris. Cracks or medium spalls in deck and/or headers may be present adjacent to joint.

Large spall and debris blocking the joint.

Moderate loss of adhesion allowing moisture onto the pier.
Pourable/Cork Joint Seal

**Condition State 4**
The joints have failed allowing extensive moisture penetration. Joint sealant may be almost completely lost. Joint may be heavily impacted with debris and/or stones. Adjacent deck may be severely cracked or spalled.

Significant loss of sealant.

Seal has failed leading to extensive water leakage through the joint.
Compression Joint Seal
Compression Joint Seal

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JCOS</td>
<td>Compression Joint Seal</td>
<td>m of Joint</td>
</tr>
</tbody>
</table>

This element defines only those deck joints filled with a pre-formed compression type seal.

For each of the condition states, report the estimated quantity in linear metres.

Condition state descriptions

<table>
<thead>
<tr>
<th>Condition State</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The element shows minimal deterioration. Adhesion is sound with no signs of leakage. The adjacent deck and/or header is sound.</td>
</tr>
<tr>
<td>2</td>
<td>There may be small adhesion failures. The seal may show signs of abrasion or minor tearing. Minor spalls or cracking in the deck and/or headers may be present.</td>
</tr>
<tr>
<td>3</td>
<td>There may be moderate adhesion failures. The seal may show signs of abrasion or moderate tearing. Moderate spalls or cracking in the deck and/or headers may be present.</td>
</tr>
<tr>
<td>4</td>
<td>Significant adhesion failures may be prevalent with the seal possibly showing signs of failure from abrasion or tearing. The joint may be no longer operative. Significant spalls and/or cracking may be present in the deck and/or headers adjacent to the seal.</td>
</tr>
</tbody>
</table>

Key Areas to inspect for any cracking, corrosion and other deterioration signs:

1. Joint and surrounding roadway
2. Deck underside for water leakage
3. Under footway slab and cavities
4. Extends up the kerb

Rating Guidance Notes:

Take the joint gap shown on drawings at the stated temperature to site when rating
Compression Joint Seal

**Condition State 1**
The element shows minimal deterioration. Adhesion is sound with no signs of leakage. The adjacent deck and/or header is sound.

Compression joint in reasonably good condition.
Compression Joint Seal

**Condition State 2**
There may be small adhesion failures. The seal may show signs of abrasion or minor tearing. Minor spalls or cracking in the deck and/or headers may be present.

Loose protection angle and a level difference of about 10mm at the joint.
Compression Joint Seal

**JCOS**

**Condition State 3**
There may be moderate adhesion failures. The seal may show signs of abrasion or moderate tearing. Moderate spalls or cracking in the deck and/or headers may be present.

Moderate deterioration of the seal.

Moderate loss of adhesion on either side of the compression seal.
Compression Joint Seal

**Condition State 4**

Significant adhesion failures may be prevalent with the seal possibly showing signs of failure from abrasion or tearing. The joint may be no longer operative. Significant spalls and/or cracking may be present in the deck and/or headers adjacent to the seal.

Significant spall and loose nut.

Part of the compression seal dropped down to the pier and significant loss of adhesion in the rest.
Assembly Joint/Seal
Assembly Joint/Seal

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JASS</td>
<td>Assembly Joint/Seal</td>
<td>m of Joint</td>
</tr>
</tbody>
</table>

This element defines only those deck joints fitted with an assembly or stripseal mechanism such as a finger joint or modular bridge expansion joint that may or may not have a seal.

For each of the condition states, report the estimated quantity in linear metres.

**Condition state descriptions**

<table>
<thead>
<tr>
<th>Condition State</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The element shows minimal deterioration. The adjacent deck anchors are tight. There are no broken welds or fingers. There are no untoward noises upon impact. The adjacent deck is sound.</td>
</tr>
<tr>
<td>2</td>
<td>There may be minor weld cracking in non structural members. There are no untoward noises upon impact. The seal, if any, may show signs of abrasion or minor tearing. The adjacent deck shows no signs of anchors loosening. There may be minor spalling or cracking of the anchorage concrete. There may be minor misalignment of the fingers or transverse centre beams.</td>
</tr>
<tr>
<td>3</td>
<td>The seal, if any, may show signs of abrasion or tearing. Some anchorages may be loose. There may be significant spalling or cracking of the anchorage concrete. There may be misalignment of the fingers or transverse centre beams. There may be more noise from vehicle impact.</td>
</tr>
<tr>
<td>4</td>
<td>There may be weld cracking. The expansion joint/seal may not be functioning. The assembly may have broken loose because of anchorage failure. Deck may be spalling or severely cracked adjacent to the assembly. Broken fingers may be prevalent. Misaligned fingers or transverse centre beams. There may be very significant noise from vehicle impact.</td>
</tr>
</tbody>
</table>

**Key Areas to inspect** for any cracking, corrosion and other deterioration signs:

1. Joint and surrounding roadway
2. Deck underside for water leakage
3. Noise emanating from joint

**Rating Guidance Notes:**

Take the joint gap shown on drawings at the stated temperature to site when rating
Assembly Joint/Seal  

**Condition State 1**  
The element shows minimal deterioration. The adjacent deck anchors are tight. There are no broken welds or fingers. There are no untoward noises upon impact. The adjacent deck is sound.

Joint in good condition.

Joint in good condition.
Assembly Joint/Seal

**Condition State 2**
There may be minor weld cracking in non structural members. There are no untoward noises upon impact. The seal, if any, may show signs of abrasion or minor tearing. The adjacent deck shows no signs of anchors loosening. There may be minor spalling or cracking of the anchorage concrete. There may be minor misalignment of the fingers or transverse centre beams.

Minor misalignment.
Assembly Joint/Seal

**Condition State 1**
The seal, if any, may show signs of abrasion or tearing. Some anchorages may be loose. There may be significant spalling or cracking of the anchorage concrete. There may be misalignment of the fingers or transverse centre beams. There may be more noise from vehicle impact.

![Significant spalling of concrete adjacent to the joint.](image-url)
Assembly Joint/Seal

**Condition State 4**
There may be weld cracking. The expansion joint/seal may not be functioning. The assembly may have broken loose because of anchorage failure. Deck may be spalling or severely cracked adjacent to the assembly. Broken fingers may be prevalent. Misaligned fingers or transverse centre beams. There may be very significant noise from vehicle impact.

Joint in poor condition.

Joint in poor condition.
Assembly Joint/Seal

**Condition State 4**

There may be weld cracking. The expansion joint/seal may not be functioning. The assembly may have broken loose because of anchorage failure. Deck may be spalling or severely cracked adjacent to the assembly. Broken fingers may be prevalent. Misaligned fingers or transverse centre beams. There may be very significant noise from vehicle impact.

Broken anchor bolts and assembly breaking loose.

Joint in poor condition.
Joint - No Seal
## Joint - No Seal

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JNOS</td>
<td>Joint - No Seal</td>
<td>m of Joint</td>
</tr>
<tr>
<td></td>
<td>This element defines only those deck joints that are open and not sealed.</td>
<td></td>
</tr>
</tbody>
</table>

For each of the condition states, report the estimated quantity in linear metres.

### Condition state descriptions

<table>
<thead>
<tr>
<th>Condition State</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The element shows minimal deterioration. Joint protection, if present, is secure. The adjacent deck is sound.</td>
</tr>
<tr>
<td>2</td>
<td>There may be minor deck cracking but protection anchor is firm. There is no significant spalling of the deck adjacent to the joint. There may be corrosion on joint protection.</td>
</tr>
<tr>
<td>3</td>
<td>There may be medium deck cracking indicating anchor loosening. Spalling at joint edges or adjacent to protection may have begun. There is significant corrosion on joint protection. There may be debris blocking the joint. There may be loss of or excessive gap joint.</td>
</tr>
<tr>
<td>4</td>
<td>Advanced corrosion causing section loss of joint protection. There may be large spalls at the joint edges or adjacent to protection. Protection anchors may be loose. The joint protection may be distorted. There may be debris blocking the joint. There may be loss of or excessive gap joint.</td>
</tr>
</tbody>
</table>

### Key Areas to inspect for any cracking, corrosion and other deterioration signs:

1. Joint and surrounding deck at wheel tracks
2. Noise from the joint under traffic

### Rating Guidance Notes:

Take the joint gap shown on drawings at the stated temperature to site when rating
Joint - No Seal

Condition State 1
The element shows minimal deterioration. Joint protection, if present, is secure. The adjacent deck is sound.

Joint in good condition.
Joint - No Seal

**Condition State 2**
There may be minor deck cracking but protection anchor is firm. There is no significant spalling of the deck adjacent to the joint. There may be corrosion on joint protection.

Loose protection angle removed. Minor spall at concrete edge.
Joint - No Seal

**Condition State 3**
There may be medium deck cracking indicating anchor loosening. Spalling at joint edges or adjacent to protection may have begun. There is significant corrosion on joint protection. There may be debris blocking the joint. There may be loss of or excessive gap joint.

Joint blocked with debris. Minor spalls at joint edges.
Joint - No Seal

<table>
<thead>
<tr>
<th>Condition State 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced corrosion causing section loss of joint protection. There may be large spalls at the joint edges or adjacent to protection. Protection anchors may be loose. The joint protection may be distorted. There may be debris blocking the joint. There may be loss of or excessive gap joint.</td>
</tr>
</tbody>
</table>

Loose and broken protection angle.

Protection angle is loose and noisy.