

Steel deck shear stud welding - JSA - C

en-SG · Supervision, records, handover · v1.0 · 2026-10-14 · Sources: article section 9

Site: | Item ID: | Work area:

| Approval | Work supervisor | Technical reviewer | Release / handover authority |
|----------|-----------------|--------------------|------------------------------|
|          |                 |                    |                              |

1. Job details and team signatures

|                 |                 |  |  |          |  |            |  |
|-----------------|-----------------|--|--|----------|--|------------|--|
| Date / time     | Location / area |  |  | Assessor |  | Supervisor |  |
| Team signatures |                 |  |  |          |  |            |  |

2. Conditions and hold points

| Stage                     | Time | Location / area | Environment / readings | Item / condition | Controls | Plant / tools | Approval / signature |
|---------------------------|------|-----------------|------------------------|------------------|----------|---------------|----------------------|
| HP-0 Start                |      |                 |                        |                  |          |               |                      |
| HP-1 Confirm combination  |      |                 |                        |                  |          |               |                      |
| HP-2 Prepare fire area    |      |                 |                        |                  |          |               |                      |
| HP-3 Prepare and test     |      |                 |                        |                  |          |               |                      |
| HP-4 Release for concrete |      |                 |                        |                  |          |               |                      |

Complete after actual checks. Recheck after changes, defects or shift handover.

3. JSA risk assessment

| Job stage                       | Hazards and effects                                                     | Failure factors                                                                         | Technical and procedural controls                                                                             | Site verification                                                                                            | P | S | R | A |
|---------------------------------|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|---|---|---|---|
| 1. Procedure and platform       | 1. Weak stud joint<br>2. Deck failure<br>3. Worker fall                 | 1. Combination unapproved<br>2. Deck unsecured<br>3. Openings unprotected               | 1. Match procedure and materials<br>2. Verify work platform load<br>3. Assign fall-protection duties          | 1. Stud deck and base identity<br>2. Procedure and inspection scope<br>3. Platform and fall-plan checks      |   |   |   |   |
| 2. Hot-work coordination        | 1. Fire below<br>2. Arc exposure<br>3. Blocked escape                   | 1. Packaging introduced<br>2. Screen displaced<br>3. Other trades unbriefed             | 1. Inspect complete spark path<br>2. Coordinate lower-area controls<br>3. Assign watch and authorisation      | 1. Lower-level combustible survey<br>2. Watch and fire equipment<br>3. Trade briefing and permit scope       |   |   |   |   |
| 3. Electrical and trial release | 1. Electric shock<br>2. Defective fusion<br>3. False trial acceptance   | 1. Return confused with earthing<br>2. Fit wet or loose<br>3. Trial combination differs | 1. Verify separate electrical functions<br>2. Prepare dry tight fit<br>3. Record representative trial         | 1. Supply gun and cable checks<br>2. Actual combination and settings<br>3. Trial result and production scope |   |   |   |   |
| 4. Production monitoring        | 1. Fume exposure<br>2. Weld inconsistency<br>3. Burn injury             | 1. Coating unassessed<br>2. Cable heating ignored<br>3. Hot studs touched               | 1. Maintain exposure controls<br>2. Monitor operating conditions<br>3. Protect hot work zone                  | 1. Fume assessment<br>2. Current and setup trends<br>3. Stud locations and status                            |   |   |   |   |
| 5. Repair acceptance            | 1. Defect concealed<br>2. Repeat poor weld<br>3. Flying fragment        | 1. Appearance alone accepted<br>2. Cause unresolved<br>3. Unsafe ferrule removal        | 1. Apply specified inspection<br>2. Use approved repair and retest<br>3. Control cooled fragments             | 1. Defect location map<br>2. Repair method and cause<br>3. Retest and inspection closure                     |   |   |   |   |
| 6. Concrete handover            | 1. Hidden fire<br>2. Unaccepted studs covered<br>3. Sharp debris injury | 1. Watch ended early<br>2. Pour release omitted<br>3. Ferrules left on deck             | 1. Complete post-work fire checks<br>2. Transfer weld acceptance map<br>3. Clear debris and retain protection | 1. Fire-area closure record<br>2. Stud repair and retest map<br>3. Pour decision and load limits             |   |   |   |   |

P/S/R/A: Complete only after actual site assessment using the site risk method.

4. Pre-work checklist

|                                                        |                                                         |                                                        |
|--------------------------------------------------------|---------------------------------------------------------|--------------------------------------------------------|
| <input type="checkbox"/> Stud deck and base identity   | <input type="checkbox"/> Lower-level combustible survey | <input type="checkbox"/> Supply gun and cable checks   |
| <input type="checkbox"/> Fume assessment               | <input type="checkbox"/> Defect location map            | <input type="checkbox"/> Fire-area closure record      |
| <input type="checkbox"/> Platform and fall-plan checks | <input type="checkbox"/> Stud locations and status      | <input type="checkbox"/> Pour decision and load limits |