

Steel deck shear stud welding - JSA - A

en-SG · Basic task controls · 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. Confirm combination	1. Weak stud weld 2. Deck failure 3. Trip on connector	1. Layers unapproved 2. Deck incomplete 3. Connector access not planned	1. Match approved combination 2. Verify secured work platform 3. Plan safe connector sequence	1. Stud and ferrule 2. Deck and base steel 3. Platform condition				
2. Prepare fire area	1. Fire below 2. Arc exposure 3. Edge fall	1. Lower fuel hidden 2. Screen absent 3. Opening unprotected	1. Inspect all spark paths 2. Screen neighbouring trades 3. Protect edges and holes	1. Lower-level survey 2. Fire watch and equipment 3. Access protection				
3. Prepare and test	1. Defective fusion 2. Metal ejection 3. Burn	1. Gap under deck 2. Wet surface 3. Wrong settings	1. Check tight dry fit 2. Clean joint zone 3. Make specified trial	1. Surface and fit 2. Settings and supply 3. Trial result				
4. Weld production	1. Fire 2. Fume exposure 3. Weld inconsistency	1. Conditions change 2. Coating unassessed 3. Cable heating	1. Maintain fire controls 2. Use planned extraction 3. Monitor welding condition	1. Watch and lower area 2. Fume controls 3. Current and weld trend				
5. Inspect and repair	1. Defect concealed 2. Hot fragment 3. Repeat poor weld	1. Appearance alone 2. Ferrule broken unsafely 3. Cause not resolved	1. Use specified inspection 2. Control cooled fragments 3. Apply approved repair	1. Inspection method 2. Defect map 3. Repair procedure				
6. Release for concrete	1. Defect covered 2. Smouldering fire 3. Sharp debris	1. Pour starts early 2. Post-work check missed 3. Ferrules scattered	1. Close weld defects 2. Complete fire checks 3. Clear sharp debris	1. Inspection closure 2. Fire-watch completion 3. Deck housekeeping				

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

4. Pre-work checklist

☐ Stud and ferrule	☐ Lower-level survey	☐ Surface and fit
☐ Watch and lower area	☐ Inspection method	☐ Inspection closure
☐ Platform condition	☐ Current and weld trend	☐ Deck housekeeping