



General Risk Assessment Form RA1

(Refer to Notes for Guidance before completing this form)

School Assessment No:	STR0002
Title of Activity:	Sample Preparation for Adhesive Strength Test
Location(s) of Work:	WRB Construction Materials Lab
Brief Description of Work:	
<p>Test samples will be prepared by bonding together two steel tubes using an epoxy adhesive. Two types of epoxy adhesive are used: Sikadur 330, and Tyfo S. This Risk Assessment covers preparation and curing of the samples.</p> <p>This Risk Assessment should be read in conjunction with the Safe System of Work (SSW) and the Materials Safety Data Sheets (MSDS) for the adhesives.</p>	

Hazard Identification: Identify all the hazards; evaluate the risks (low / medium / high); describe all existing control measures and identify any further measures required. Specific hazards should be assessed on a separate risk assessment form and cross-referenced with this document. Specific assessments are available for hazardous substances, biological agents, display screen equipment, manual handling operations and fieldwork. See <http://www.ed.ac.uk/schools-departments/health-safety/risk-assessments-checklists/risk-assessments> for details.

Hazard(s)	Present Risk Evaluation L/M/H	Control Measures (i.e., alternative work methods / mechanical aids / engineering controls, etc.)	Risk Evaluation after control L/M/H
General hazards in lab environment			
Trips, falls, and dropped items	H	Ensure lab area is clear of clutter. Ensure there are no trailing cables and similar trip hazards. Wear safety boots at all times.	L
Preparation of steel tubes			

Lacerations from sharp edges of tubes	M	Ensure sharp edges are removed by filing or grinding. Wear gloves.	L
Injuries during to grit blasting	M	Grit blasting to be carried out by technical staff or under supervision.	L
Inhalation of solvents during cleaning	M	Solvent cleaning must be carried out in well ventilated area, for example, under an extraction hood. Wear gloves to avoid skin contact.	L
Bonding of steel tubes			
Breathing vapours or skin irritation from epoxy adhesive	M	Epoxy mixing and use must be carried out in well ventilated area, for example, under an extraction hood. Wear gloves to avoid skin contact. Keep a stock of clean disposable gloves, paper towels and a waste container to hand. Keep tools clean.	L
Skin contact, lacerations etc by other lab users after bonding.	L	Immediately after bonding, dispose of any waste, clear away tools, and clearly label the specimens for other lab users' information.	L
Curing of the specimens			
Burns when handling samples being cured in oven.	L	Wear gloves. Take normal precautions when handling items. Ensure that there is a safe place to put samples before taking them from oven.	L
Breathing dust from desiccant	L	Wear dust mask	L
Eye and skin irritation from activated desiccant	L	Wear safety glasses with side shields, gloves and protective clothing to avoid skin contact.	L

Engineering Controls: *Tick relevant boxes*

Guarding	<input type="checkbox"/>	Extraction (LEV)	<input checked="" type="checkbox"/>	Interlocks	<input type="checkbox"/>	Enclosure	<input type="checkbox"/>
Other relevant information (incl. testing frequency if appropriate):							

Personal Protective Equipment (PPE): Identify all necessary PPE.

Eye / Face	X	Hand /Arm	X	Feet / Legs	X	Respiratory	
Body (clothing)	X	Hearing		Other (Specify)			
Specify the grade(s) of PPE to be worn:							
<ul style="list-style-type: none"> • Safety boots with protective toe cap and sole. • Safety glasses with side shields • Riggers or similar heavy gloves for handling steel and hot specimens; disposable gloves during bonding. • Old clothing or lab coats. 							
Specify when during the activity the item(s) of PPE must be worn: At all times during sample preparation							

Non-disposable items of PPE must be inspected regularly and records retained for inspection

Persons at Risk: Identify all those who may be at risk.

Academic staff	X	Technical staff	X	P'Grad students	X	U'Grad students	X
Maintenance staff		Office staff		Cleaning staff	X	Emergency personnel	
Contractors		Visitors		Others			

Additional Information: Identify any additional information relevant to the activity, including supervision, training requirements, special emergency procedures, requirement for health surveillance etc.

No other special procedures.

Prepared by

Researcher: Daryan Othman (PhD Student)	
Signature:	Date:

Approved by

PhD Supervisor: Tim Stratford	
Signature:	Date:

Lab Manager: Tim Stratford	
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Signature:

Date:

Review Date: 8/8/13