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## Spray Painting Booths Inspection Report

According to AS/NZS 4114.2:2020

Prepared and Reported by: Sam Moniri

Dated: 05/04/2022

Report No:0077615

BKB Motor vehicle Repair Pty Ltd  
2 Lovell Road EASTWOOD NSW 2122

Cause	Requirement by Standards	Status	Remarks
1	<b>DESIGN AND CONSTRUCTION</b>		
1.1	<b>General</b>		
1.2	The spray booth and associated equipment shall be of robust construction etc	ok	
1.3	Materials shall be non-combustible and capable of passing impact test	ok	
1.4	Interior surfaces will have smooth surface.	ok	
1.5	Expansion - Designed and materials suitable for expansion stresses.	ok	
1.6	Doors	ok	
1.7	Entry/Exit of tunnel or production booth	ok	
1.8	Guarding of moving parts	ok	
1.9	Shelves	ok	
1.10.0	Equipotential bonding	ok	
2	<b>DUCTS</b>		
2.1	Construction adequately braced and supported	ok	
2.2	Sealing	ok	
2.3	Joints in ducts	ok	
2.4	Entrance to fresh air inlet duct	ok	
2.5	Access to ducts	ok	
2.6	Access for cleaning purposes-ducts for fume that leave combustible deposits	ok	
2.7	Condensation for vapours-means of removing condensed vapours	ok	
2.8	Ducts- arrangement and height to meet relevant authorities	No	Carsoft quoted to fix
2.9	Common inlet or exhaust ducts	No	Carsoft quoted to fix
3	<b>SPECIFIC ARRANGEMENTS</b>		
3.1	<b>General</b>		
3.2	Operational-Interlocks on access doors to ensure doors are shut during spray	ok	
3.3	<b>Booth Construction</b>		
3.3.1	Materials impervious, non-combustible materials,blocked filter indicator	ok	
3.3.2	Supporting structures-not located inside booth	ok	
3.3.3	Windows and glazing-proof of compliance with AS 2208, impact and thermal shock to AS 2380.1	ok	
3.3.4	Combustible materials not located within 100mm of external cladding	No	Carsoft quoted to fix

3.3.5	Emergency exit- a) no more than 6m to exit	ok	
	b) No exit through hazardous area	ok	
	c) Clear of obstacles	ok	
	d) Signage requirements	no	Carsoft quoted to fix

	<b>Booth Construction continues</b>		
	e) Door non-lockable and open outwards	ok	
	f) Emergency exit doors to be push open type	ok	
	g) Roller door requirements	ok	
3.4	<b>ELECTRICAL EQUIPMENT</b>		
3.4.1	<b>General</b>		
3.4.2	Hazardous area equipment - comply with AS2381.1	ok	
3.4.3	<b>Luminaires</b>		
3.4.3.1	Accessible from inside booth		not applicable
3.4.3.2	Accessible from outside booth	ok	
3.4.4	Other electrical apparatus and ignition sources	ok	
3.4.5	Infrared heating		not applicable
4	<b>VENTILATION OF SPRAY BOOTH</b>		
4.1	<b>General</b>		
4.2	<b>AIRFLOW</b>		
4.2.1	<b>General</b>		
4.2.2	<b>Ventilation Design</b>		
4.2.2.1	<b>General</b>		
4.2.2.1a	Air entering spary booth	ok	
4.2.2.1b	Minimize possibility of mixing the exhaust air with the intake air(separation)	ok	
4.2.2.1c	Uniform and evenly distributed supply of air shall flow (no pockets of still air).	ok	
4.2.2.1d	Monitoring system or systems shall be provided for sensing airflow and perform certain functions based on airflow situation	ok	
4.2.2.1e	The difference in air pressure between the spray painting area and air outside the spray painting booth +/-50 Pa to ambient pressure	ok	
4.2.2.2	Monitoring equipment	ok	
4.2.2.3	Spray cycle airflow rate	ok	0.65 m/s
4.2.2.4	Bake cycle airflow rate	ok	
4.2.2.5	Purge	ok	
4.2.2.6	Failure of the ventilation system-spray system to cease on reduction of airflow etc.	ok	
4.3	<b>CONTROL SYSTEMS</b>		
4.3.1	<b>Duration of Ventilation System</b>		
4.3.1.1	<b>General</b>		
4.3.1.2	Prior to spraying - minimum 1 minute pre-purge	ok	
4.3.1.3	Following spraying-minimum 5 minute post-purge	ok	
4.3.1.4	Following spraying with baking	ok	
4.3.1.5	Baking that does not immediately follow after a spary cycle	ok	
4.3.1.6	Ventilation system with more than one fan	ok	
4.4	<b>Exhaust Air</b>		
4.4.1	Location of exhaust air outlets	No	carsoft quoted to fix
4.4.2	<b>Exhaust Ventilation</b> Fan & motors accessible for cleaning. Entry of drive shafts or belts sealed to prevent egress of exhaust or meet Clause 2.10b	ok	

4.4.3	Exhaust Air cleaning and Discharge	ok	
4.4.4	Filters	ok	

<b>5</b>	<b>SPRAY BOOTH OPERATION</b>		
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5.1	<b>General</b>		
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	<b>Cycle</b>		
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5.2	a) operate spray cycle start control	ok	
	b) verify no flow before fans start then fans start	ok	
	c) pre-purge cycle to complete with proven airflow, then spray cycle initiated	ok	
	d) at end of spray cycle, post-purge required	ok	
	e) bake cycle commence at end of spray cycle	ok	

<b>5.3</b>	<b>HEATING SYSTEM</b>		
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5.3.1	<b>Permitted Types:</b>		
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5.3.2	<b>System Requirements</b>		
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5.3.2.1	<b>General</b>		
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5.3.2.2	Heat Exchangers	ok	
5.3.2.3	Heat Exchanger flues	ok	
5.3.2.4	Inspection of Heat Exchangers	ok	
5.3.3	Heating Controls	ok	

<b>6</b>	<b>MARKINGS</b>		
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6.1	General a) name of manufacturer marked on booth	No	carsoft quoted to fix
	b) model & serial number marked on booth	No	carsoft quoted to fix
	c) rated voltage marked on booth	No	carsoft quoted to fix
	d) rated current in amps per phase marked on booth	No	carsoft quoted to fix
	e) frequency marked on booth	No	carsoft quoted to fix
	f) operating instructions on booth	No	carsoft quoted to fix
	g) any certification or approval numbers marked on booth	No	carsoft quoted to fix
	h) maximum paint solvent application rate marked on booth	No	carsoft quoted to fix
	i) airflow rate marked on booth	No	carsoft quoted to fix
	j) warning for luminaries accessible from within booth	No	carsoft quoted to fix
	k) electrical identification per standard	No	carsoft quoted to fix

6.2	Additional information-safe operating instructions, maintenance instructions & operating manual available	No	carsoft quoted to fix
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6.3	Warning Sign- "TOXIC &/OR FLAMMABLE VAPOURS MAY BE PRESENT" Sign outside of entry doors	No	carsoft quoted to fix
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<b>7</b>	<b>VERIFICATION AND TESTS</b>		
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7.1	<b>General</b>		
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7.1.1	<b>Purpose</b>		
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7.1.2	<b>Compliance</b>		
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7.2	<b>Verification of Documents and Design</b>		
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	a) documents give safety aspects of booth	No	carsoft quoted to fix
	b) documents include operational & maintenance instructions	No	carsoft quoted to fix
	c) design shows compliance with this standard	No	carsoft quoted to fix

<b>7.3</b>	<b>RUNNING TESTS</b>		
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7.4	<b>Ventilation System Test</b>		
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	a) requirements of pre & post purge comply	ok	
	b) door interlocks operate	ok	
	c) airflow satisfies requirements	ok	
	d) during spray cycle, minimum discharge from exhaust outlet is 10 m/s average	ok	

7.5	Airflow testing- average of airflow measurement meets Clause 4.2.2.3 & lowest value is not less than 50% of average	ok	
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Signed by: Sam Moniri

Date: 05-04-22