

COSVR53
Erect Metal Chimneys



Overview

This standard is about inspecting, preparing and erecting mechanically joined metal chimney **services and systems**, interpreting information, adopting safe, healthy and environmentally responsible work practices, selecting and using materials, components, tools and equipment, in accordance the **work area** and the **organisational procedures** which are equal to or exceed the current statutory and legislative **documentation and specifications**

This standard is for people working in the occupational area of Chimney Occupations and can be used by operatives, supervisors and managers

A description of terms in bold font in this National Occupational Standard can be found in the Glossary which should be used as a reference point

COSVR53
Erect Metal Chimneys



Interpretation of information	
Performance criteria <i>You must be able to:</i>	P1 interpret the information relating to the work and resources to confirm its relevance for the following: <ul style="list-style-type: none"> • documentation and specifications • services and systems • drawings • schedules • contract information • pre-installation surveys • risk assessments • method statements
Safe work practices	
	P2 comply with the relevant legislation, official guidance and organisational procedures to carry out your work and maintain safe, healthy and environmentally responsible work practices relating to the following: <ul style="list-style-type: none"> • methods of work • safe use of health and safety control equipment relevant to the task being undertaken and the working environment • safe use of access equipment and working platforms • safe use, storage and handling of materials, tools and equipment • specific risks to health including mental health • specific risks associated with asbestos containing materials • specific risks associated with silica dust, mortars and sealants
Selection of resources	
	P3 select the required quantity and quality of resources for the methods of work: <ul style="list-style-type: none"> • materials, components, fixings, anchors and ties • tools and equipment • access equipment

**COSVR53
Erect Metal Chimneys**



	Minimise the risk of damage	
	P4	comply with organisational procedures to minimise the risk of damage to the work and surrounding area by: <ul style="list-style-type: none"> • protecting the work and its surrounding area from damage • maintaining a safe, clear and tidy work area • disposing of waste in accordance with current legislation and industry best practice
	Meet the contract specification	
	P5	comply with the given contract information to carry out the work efficiently to the required specification by the following: <ul style="list-style-type: none"> • demonstrating work skills to measure, mark out, fit, finish, position and secure • using and maintaining hand and power tools and ancillary equipment • erecting internal or external mechanically joined metal chimney structures to working and manufacturers' instructions
	Allocated time	
Performance criteria <i>You must be able to:</i>	P6	complete the work within the estimated, allocated time in accordance with organisational procedures , the programme of work and to meet the needs of other occupations and/or client

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**COSVR53
Erect Metal Chimneys**



P1 Interpretation of information		
Knowledge and understanding <i>You need to know and understand:</i>	K1	why organisational procedures have been developed, to report and rectify inappropriate information and unsuitable resources, and how they are implemented
	K2	types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> • documentation and specifications • drawings • schedules • contract information • pre-installation surveys • risk assessments • method statements
	K3	the range of relevant digital services, tools and systems, and how they are used
	K4	the importance of organisational procedures to report and resolve problems with the information, and why it is important to follow them
P2 Safe work practices		
	K5	information for current legislation and official guidance and how it is applied
	K6	the types of fire extinguishers and how and when they are used in relation to water, CO ₂ , foam, powder
	K7	how emergencies should be responded to and reported in accordance with organisational authorisation and personal skills in relation to: <ul style="list-style-type: none"> • fires, spillages and injuries • emergencies relating to occupational activities • identification and reporting of asbestos containing materials
	K8	the organisational security procedures for tools, equipment and personal belongings in relation to: <ul style="list-style-type: none"> • operative • site • workplace • vehicles • company • customer • the general public • other occupations within the workplace

**COSVR53
Erect Metal Chimneys**



<p>Knowledge and understanding</p> <p><i>You need to know and understand:</i></p>	<p>K9</p>	<p>how to report risks and hazards identified by the following:</p> <ul style="list-style-type: none"> • methods of work • risk assessment • personal assessment • manufacturers' technical information • statutory regulations • official guidance • Control of Substances Hazardous to Health (COSHH)
	<p>K10</p>	<p>the accident reporting procedures and who is responsible for making the report</p>
	<p>K11</p>	<p>why, when and how health and safety control equipment identified by the principles of prevention should be used in relation to:</p> <ul style="list-style-type: none"> • collective protective measures • personal protective equipment (PPE) • respiratory protective equipment (RPE) • local exhaust ventilation (LEV)
	<p>K12</p>	<p>how to comply with environmentally responsible work practices to meet current legislation and official guidance when dealing with potential accidents, health hazards and the environment in relation to working:</p> <ul style="list-style-type: none"> • in the workplace • below ground level • in confined spaces • at height • with tools and equipment • with materials and substances • whilst moving and storing materials by manual handling and mechanical lifting

**COSVR53
Erect Metal Chimneys**



P3 Selection of resources	
Knowledge and understanding <i>You need to know and understand:</i>	K13 why the characteristics, quality, uses, sustainability, limitations and defects associated with the resources are important and how defects should be rectified
	K14 the organisational procedures to select resources, why they have been developed and how they are used
	K15 how to confirm the resources and materials conform with the specification
	K16 how the resources should be used and how any problems associated with the resources are reported in relation to: <ul style="list-style-type: none"> • metal chimney components • ventilated fire stops • wall sleeves • boxing and access materials • jointing materials • sealants • fixings • anchors • ties • fittings • hand tools • equipment
	K17 how to identify the hazards associated with the resources and methods of work and how they are overcome
	K18 how to calculate the quantity, length and wastage
P4 Minimise the risk of damage	
	K19 how to protect work and its surrounding area from damage and the purpose of protection from general workplace activities, other occupations and adverse weather conditions and how to minimise damage to existing building fabric
	K20 why and how the disposal of waste must be carried out safely in accordance with the following <ul style="list-style-type: none"> • environmental responsibilities • organisational procedures • manufacturers' information • statutory regulations • official guidance
	K21 why it is important to maintain a safe, clear and tidy work area

**COSVR53
Erect Metal Chimneys**



Knowledge and understanding	P5 Meet the contract specification	
<i>You need to know and understand:</i>	K22	<p>how the methods of work to meet the specification, are carried out and how problems are identified and reported by the application of knowledge for safe, healthy and environmentally responsible work practices, procedures and skills relating to the method and area of work in relation to the following:</p> <ul style="list-style-type: none"> • how to erect and dismantle internal and external mechanically joined metal chimney structures • how to provide temporary and permanent support • why it is important to provide temporary and permanent support • the importance of flue designation and how to check that the flue is compatible with the appliance and its intended use • the importance of how the flue passes through floors, internal and external walls including ventilated fire stops and wall sleeves • why it is important to meet the distance to combustibles requirement including maintaining a distance between boxing in and cages • why it is important to minimise the amount of bends in the system • why it is important to select the correct flue diameter • why it is important that the flue terminates in an appropriate position • how to provide access for inspection and maintenance • how to carry out remedial preparation and making good to the building structure • how to install anchors and ties • how to work with lifting equipment and accessories • the relevance of an assessment of significance and how to recognise, specific requirements for structures of special interest, traditional construction, hard-to-treat buildings and historical significance • how to work safely with, around and in close proximity to plant and machinery • how to identify and follow the installation quality requirements • how to use hand and power tools and equipment • how to work at height using access equipment • how and why operative care and maintenance of hand and power tools and equipment is carried out
	K23	<p>the importance of team-work and communication, organisational procedures with respect to site behaviours, and how to report to inappropriate site behaviours</p>

**COSVR53
Erect Metal Chimneys**



	K24	the needs of other occupations associated with erecting metal chimneys
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	P6 Allocated time	
	K25	the programme of work to be carried out including the estimated and allocated time and why deadlines should be kept
	K26	the types of progress charts, timetables and estimated times and the organisational procedures for reporting circumstances which will affect the work programme
Glossary		<p>Organisational procedures</p> <p>Organisational Insurances – public, product and employers liability, professional indemnity</p> <p>Company documents contract for the work, safety management plan, CDM, environmental policy, complaints procedure, information privacy and security policy, management structure</p> <p>Work area The area where the equipment will be installed and all areas affected by the work extending to topographical features and meteorological conditions</p> <p>Services and systems Chimney and flue systems, appliances, ventilation systems and appropriate utilities</p> <p>Documentation and specifications Manufacturers' instructions for all equipment that forms part of the work architect's plans and site-specific documentation local building rules and regulations Party Wall legislation Clean Air Act Environment Act Smoke Control Zones</p>

COSVR53
Erect Metal Chimneys



	<p>Permitted Development Conservation Areas Heritage status Areas of Outstanding Natural Beauty Sites of Special Scientific Interest specific requirements of insurance underwriters Building regulations in England and Wales, particularly ADJ but also ADA, ADB, ADF, ADL and AD7 Building Standards Technical Handbook in Scotland Technical Booklets in Northern Ireland, particularly B, D, E, F1, F2, K and L BSEN's particularly 8303, 15287, 1856, 16510, 1251, 3376, 4834, 12815, 13229, 13240, 15250</p> <p>Note: Technical and BSEN documents may be withdrawn or superseded during review programmes, it is therefore important to check the currency and validity of all such documents to ensure the correct version is being referenced.</p> <p>Appliances Solid fuel burning appliances up to 50kW output including but not limited to the following:</p> <ul style="list-style-type: none">• open fires• free standing room heaters• inset room heaters• free standing cookers• independent boilers• slow heat release stoves
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