



THE RESIN FLOORING APPRENTICESHIP SCHEME

Prepare and Profile Substrates

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SECTOR BACKGROUND

Surface Preparation is a highly specialised activity within the construction industry from the specialist contractors.

A wide range of techniques, tooling and equipment enable the specialist contractors to carry out a range of applications for new build and refurbishment in both the industrial and commercial environments.

There is a shortage of new entrants into this specialist sector and current training provision is by individual employers providing on the job training, together with limited supplier (resin manufacturers) product training.

The preferred minimum age for new recruits will be 18 years of age upwards, with no upper age limit as this scheme is aimed at all newcomers to the industry. There is thought to be no requirement for 'key skills' inclusion.

This sector scheme is designed to be delivered in a modularised manner by a mix of formal instruction off the job, followed by supervised on the job training at employer level, with a final end assessment by an industry approved Assessor. This supervision will be conducted by a competent person and there will be a candidate record book to evidence training received.

The trainee will gain experience, through off the job training sessions, of every aspect of the industry, but the scheme provides flexibility through the on the job training elements to suit the employer's core business requirements, whilst delivering the NVQ level 2 outcome after a 2 year training period.

The contents of this course are designed to ensure that the operator is able to understand the hazards and the safe working practices within this specialised trade and, upon completion of training, the Apprentice will be able to operate equipment and lay resin floors to industry standards of competence.

The course days will not be continuous, as this allows the candidate to gain practical on site knowledge and experience following completion of each offsite formal training session.

TRAINING MODULES

Modules have been developed to introduce the trainee to the occupational competencies required for the various machines, equipment used in the industry.

The modules focus on the use and application of underpinning knowledge and practical skills, and will enhance the awareness of safety, security and approved procedures for surface preparation.

Furthermore, the modules are based upon the NVQ Structure (Magenta Scheme) to assist with gaining recognition for Construction Awards Alliance (CAA) accreditation. Any future changes in NVQ or legislation will be reflected by modifications to the course structure.

Most modules will consist of an initial 2 days Classroom/Workshop session, and the core sector introduction module.

Most formal instruction within the modules will be followed by a specified number of non consecutive days of supervised site training, and 1 day assessment conducted by an industry approved assessor.

It is the intention that the employer supervised training element will be conducted by a competent person with 3 years sector experience, have an understanding of the NVQ system and hold the relevant CSCS card (Industry Accreditation or Skilled Card). In addition, it is a requirement that the competent person will have received Work Based Recorder training. The training provider will ensure that suitable instruction and advice is made available to the competent person to ensure quality and consistency throughout the scheme. Off the job classroom/workshop training will take place at training centres approved by the training provider.

It is envisaged that individual modules can also be made available to provide training where existing operatives have skill gaps identified during the NVQ/OSAT process.

SCHEME SCHEDULE

Module Number	Course Modules	Mandatory Off Site Instruction	On Site Supervised Training Assessment	Month
1	Introduction to the NVQ	½ Day	N/A	1 st week
2	Health & Safety	1½ Days	N/A	1 st week
3	CSCS & NVQ Registration & Induction, test preparation	1 Day	N/A	1 st week
4	Introduction to Surface preparation	1 Day	N/A	2
5	Work practice & project planning	1 Day	N/A	2
6	Key Skills	withdrawn	N/A	
7	First Aid Appointed Person	½ Day	N/A	4
8	Manual Handling & Vehicle Loading	1 Day	N/A	4
9	Abrasive & Diamond Wheels	½ day	N/A	4
10	Shotblasting	3 Days	30 days plus 2 days assessment	6
11	Planing	2 Days	10 days plus 2 days assessment	8
12	Grinding	2 Days	10 days plus 2 days assessment	10
13	Polishing	2 Days	10 days plus 2 days assessment*	12
14	Multi-Stripping	2 Days	10 days plus 2 days assessment	14
15	On-site training, unit assessments and final sign off			23-24
		27 Days	80days (minimum)	

* Where employer permits onsite activity

MODULES CONTENT AND DESCRIPTION***Module 1: Introduction to the NVQ/ERR***

This module includes the following practical and knowledge skills:

Practical	Knowledge
	<p>Trainee will be able to:</p> <ul style="list-style-type: none"> ▪ Understand the structure of the NVQ and the knowledge and practical skills included within the apprentice scheme ▪ Understand the role and responsibilities of: <ul style="list-style-type: none"> ▪ The candidate ▪ The Employer ▪ The Work Supervisor ▪ The Trainer ▪ The Assessor ▪ Have knowledge of the Scheme Logbook and understand what is relevant documentation/supporting evidence ▪ Understand the onsite assessment process ▪ Understand how to build a portfolio <ul style="list-style-type: none"> ▪ What is evidence ▪ How much evidence is required ▪ Understand that Employers and Employees have a range of statutory rights and responsibilities <ul style="list-style-type: none"> ○ Contracts of employment ○ Anti-discrimination provisions (gender, race, disability, age) ○ Working hours and holiday entitlements ○ Sickness absence and sick pay ○ Data Protection ○ Health and Safety ○ Legislative frameworks in the sector

Module 2: Health & Safety AwarenessDay 1

Off-Site Training Course content will include:

- Health & Safety Legislation
- Health & Safety at Work Legislation
- Accident prevention & control
- Accident reporting
- Health & Hygiene
- Working at Heights
- Working with Electricity
- Use of hand-held equipment & portable tools
- Personal Protective Equipment
- Noise & vibration
- Manual handling
- Safe Use of Vehicles
- Fire prevention & safety
- Excavations & confined spaces
- Control of Substances Hazardous to Health
- First Aid
- End test

Day 2 - Module 2: Health & Safety Awareness

Course content will include the following knowledge areas:

- Hazards
- Lifting appliances and lifting gear
- Environmental/Removal of waste products
- Falling from height
- Site understanding
- Abrasive Wheels instruction
- End Test – based upon Health & Safety Touch Screen (pre-test) questions and course content.

Module 3: CSCS & NVQ Registration & Induction/Core Sector introduction

In this module the candidate is registered with both the CSCS and NVQ schemes, is prepared for the Health & Safety Touch Screen test

This module includes the following practical and knowledge skills:

Practical	Knowledge
Completion of the registration forms and pre-test training using CD Rom	An understanding of the NVQ process and the modular structure of the specified surface preparation qualification The candidate will be able to interpret and select the correct response for the Health & Safety touch screen test.

The candidate is also introduced to the core sector elements as listed below:

A Provide for and maintain the security of the work and surrounding environment

Practical	Knowledge
Placement of barriers & signage Dismantle & Remove equipment	Trainee will be able to: Understand the legal obligation to protect themselves, the area and members of the public. Aim to limit/prevent access overnight by uninvited guests to the working area How to deal with visitors to the working area Interpret requirements for the protection & safety of the work & surrounding environment from: <ul style="list-style-type: none"> ▪ Method statements/risk assessments ▪ Site Inductions Have an understanding of protection & safety requirements including types of signage, barriers and their usage <ul style="list-style-type: none"> ▪ Security ▪ Environmental Have an understanding of <ul style="list-style-type: none"> ▪ Appropriate time of removal ▪ Correct procedures ▪ Storage of equipment

B Operate power tools & equipment for routine & predictable requirements

Practical	Knowledge
Be able to: Prepare power tools & equipment	Understanding of manufacturers pre-start checks, including visual checks for defects on cables etc
Recognise faults & defects	
Report defects	Reporting procedures for defects
Safely run & operate powered hand tools & equipment	Have an understanding of the capabilities of tools, operational practices Able to understand manufacturers requirements when completing operation in a safe manner, maintenance and care of tools and equipment
Shut down & carry out post-stop checks on powered tools & equipment	
Carry out some repairs to equipment	Understand which parts they are authorised to change
	Be aware of vibration/noise hazards

C Contribute to an efficient and effective work environment

Practical	Knowledge
Be able to book out and in equipment to the companies requirements including loading and unloading, selection of materials and consumables.	
	Will have an understanding of how their actions can contribute to efficiency in the workplace with respect to wastage, damage, etc
	Be aware of how to develop & maintain working relations with employers, colleagues and others associated with the work, i.e. clients, architects, sub contractors.
	Understand the concept of organising their own work & maintaining standards through knowledge of operational & organisational procedures for the work & standards required, i.e. job record sheets

Module 4: Introduction to Surface Preparation & Equipment

This module includes the following practical and knowledge skills:

Practical	Knowledge
Principals of operation Identify correct set up procedures Identify start/stop procedures Identify medium or accessories used Range of applications Identify the correct equipment for the specified application Types of materials <ul style="list-style-type: none"> ▪ Concrete ▪ Steel ▪ Asphalt/Bituminous materials ▪ Stone ▪ Tiles ▪ Screed ▪ Coatings Assess surface conditions Assess surface type and identify correct equipment and accessories Identify safety features, how they work and how to use Disposal of debris Regulations affecting the use of surface preparation	The different types and sizes of surface preparation equipment and tools <ul style="list-style-type: none"> ▪ Shotblasters ▪ Planers ▪ Grinders ▪ Multi – Strippers ▪ Project size ▪ Production rates ▪ Profiling/Texturing ▪ Cleaning ▪ Material removal ▪ Recommended techniques for preparing/removal Effect of machine being used The effect on the surface materials Overview of different types and attachments and their functions Recognise the importance of manufacturers guidelines and recommendations, read and interpret <ul style="list-style-type: none"> ▪ Significance of surface tests ▪ The time to perform the function ▪ Medium/abrasive to use

<p>equipment Selecting the correct equipment for the task</p>	<ul style="list-style-type: none"> ▪ Key safety features of equipment designs ▪ Environmental issues ▪ Manual handling ▪ PPE ▪ IET Regulations ▪ Disposal of debris <p>Regulations affecting the use of surface preparation equipment</p>
<p>Will be able to select, fit and use the appropriate PPE (Personal Protective Equipment), store, maintain and report defects Carry out maintenance and report defects. Storage</p>	<p>The selection and correct wearing of PPE: Eye protection, ear protection, safety shoes, gloves, Hi Visibility clothing, Hard hat, respiratory equipment (half mask with particle filter). Refer to manufacturers operating manual and interpret method statements</p>

Module 5: Work Practice & Project Planning

This module includes the following practical and knowledge skills:

Practical	Knowledge
<p>Will be able to understand the job details, select the appropriate plant/equipment and PPE, and load the vehicle in a safe manner.</p>	<p>Contract information A Job record sheet, method statement and risk assessment B Outcome of operation</p>
<p>Will be able to understand any health & safety risks associated with operating machinery to carry out surface preparation</p>	<p>Product/System information A Product datasheet B COSSH datasheets</p>
	<p>Identify Personal Protection equipment as required Goggles Hard hats Safety footwear Safety gloves High visibility clothing Ventilation equipment Face masks Ear protectors</p>
	<p>Pre-work check list Security clearance for sensitive sites Tools and equipment/machinery to carry out works Disposal arrangements for hazardous and non hazardous materials Load vehicle and final check</p>
	<p>Understand safe lifting techniques</p>

Will be able to understand project planning	Journey planning to meet contract programme, taking account of access requirements, safety induction requirements and liaison with other trades, clients. Knowledge of towing regulations
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Module 6: Key Skills Training

This module has now been withdrawn from the Apprenticeship Scheme

Module 7: First Aid “Appointed Person”

This module includes the following practical and knowledge skills:

Practical	Knowledge
<p>First Aid Appointed person training to be provided to a nationally recognised standard, i.e. St Johns, Red Cross etc, at a venue close to the employers location within 6 months of being registered to the scheme.</p> <p>Certification must be recorded in the log book and a copy placed within the NVQ evidence portfolio</p>	

Module 8: Manual Handling & Vehicle off loading

This module includes the following practical and knowledge skills:

Practical	Knowledge
<p>A full day course delivered by a qualified trainer covering the current regulations and techniques for handling methods and vehicle offloading relevant to the surface preparation industry</p> <p>Certification must be recorded in the log book and a copy placed within the NVQ evidence portfolio.</p>	<p>The trainee will understand safe handling and vehicle offloading of materials and equipment</p>

Module 9: Abrasive & Diamond Wheels

This module includes the following practical and knowledge skills:

Practical	Knowledge
<p>This training module is intended to provide the apprentice with the basic skills and knowledge plus certification required to change abrasive wheels and Diamond Blade selection and use in order to be able to safely perform the tasks involved in surface preparation.</p> <p>Specialist trainers in the employer's vicinity will carry out the training in line with current legislation and industry approved methods and procedures and will issue relevant certification. Certification must be recorded in the log</p>	<p>Safe use of abrasive wheels and diamond blade selection</p>

<p>book and a copy placed within the NVQ evidence portfolio.</p> <p>This module to be completed within 6 months from registration to the apprentice programme.</p>	
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Module 10: Prepare Background Surfaces Shotblasting

Day 1 - Off site training

Practical	Knowledge
<p>The Trainee will be able to select, draw from stores equipment, accessories and tools and safely load equipment onto company transport (refresher module 6)</p>	<p>Will have an understanding of and be able to interpret information from specification/job sheets.</p>
<p>Power requirements and sources of power</p> <ul style="list-style-type: none"> ▪ 3 phase ▪ Single phase ▪ Generator ▪ Site supply 	<p>Understand precautions necessary when handling live power and actions to be taken in the event of accident</p> <p>Types and sizes of Shotblasting equipment and capabilities</p> <p>Grades and performance of steel abrasive (shot)</p> <p>Have an understanding of the type of surface to be prepared</p> <ul style="list-style-type: none"> ▪ Concrete ▪ Steel ▪ Asphalt <p>Understand surface composition and why this affects choice of equipment and process.</p> <p>Understand manufactures guidelines for preparation suitable for the material to be applied</p> <ul style="list-style-type: none"> ▪ Coating ▪ Self leveller ▪ Screed <p>Have an understanding of materials to be removed</p> <ul style="list-style-type: none"> ▪ Coatings ▪ Adhesives ▪ Contaminates
<p>Small tools and accessories</p> <p>Will be able to inspect tools and equipment to ensure that they are safe and suitable for task in hand and follow employer defect reporting procedures</p>	<p>Electric extension cables, ducting, wheelbarrow, bucket, shovel, brush and safety signs</p> <p>Regulations affecting the process</p> <p>Will understand manual handling guidelines and kinetic lifting</p> <p>Will understand the need for use of lifting aids</p> <p>Identify pre-load procedures</p> <p>Will demonstrate how to secure equipment safely using straps</p>
<p>Select and wear the appropriate PPE for the task in</p>	<p>The Trainee will have an understanding or</p>

<p>hand</p> <p>Will be able to perform tasks during training in a safe manner</p>	<p>knowledge of:-</p> <p>The Health and Safety issues relating to this operation and what PPE is available to protect themselves in different working environments (plus obligation to wear PPE provided by employer under MHSWR etc)</p> <p>The function of the appropriate PPE</p> <ul style="list-style-type: none"> ▪ safety footwear, high visibility clothing, head protection, eye protection, gloves, breathing masks, their use storage and maintenance requirements <p>Will be able to interpret COSHH, Risk information from manufactures Operators Manual to assist in choice of PPE, emergency actions in case of an accident and environmentally safe means of disposal</p> <p>Safe working practices with all equipment, tools in the work environment</p> <p>The importance of Method Statements and Risk Assessments in the safety process</p>
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Day 2 – Module 10: Shotblasting - Off site Training

<p>Prepare equipment and tools for routine and predictable requirements, range of equipment to include:-</p> <ul style="list-style-type: none"> ▪ Shotblast machine ▪ Filtration unit ▪ Compressor ▪ Generator <p>Safely run and operate powered equipment to include:)-</p> <ul style="list-style-type: none"> ▪ Shotblast machine ▪ Filtration unit ▪ Generator 	<p>Able to understand the manufacturers recommended general maintenance procedures and pre-start checks</p> <p>How to store and handle fuels such as diesel and oils for understand the relevant COSHH statements</p> <p>Able to understand manufactures requirements when completing the operation in a safe manner, maintenance and care of equipment and tools</p> <p>Have an understanding of the range of Shotblasting equipment and their operational capability and performance</p>
<p>Recognise faults and defects</p> <p>Report and record equipment and defects</p> <p>Determine what can be done safely by the operator in accordance with company policy</p> <p>Shut down and carry out post stop checks on equipment to include</p> <ul style="list-style-type: none"> ▪ Shotblast machine ▪ Filtration unit ▪ Generator 	<p>How to carry visual checks for</p> <ul style="list-style-type: none"> ▪ Cables and plugs ▪ Worn seals ▪ Holes in hoses ▪ Correct water and oil levels ▪ Electrical switches ▪ Pulsation and timings ▪ Tuning kit/blades cage impellor ▪ Setting the blast pattern ▪ Holes in the cabinet/body of the machine/filtration unit

	<p>Have an understanding and be able to adopt appropriate procedures for reporting and recording equipment and vehicle defects</p> <p>Able to understand manufactures recommended operating and shut down procedures and requirements for the general maintenance and care of equipment and tools</p> <p>Have an understanding of legislation and when to refer to a specialist i.e.</p> <ul style="list-style-type: none"> ▪ Qualified electrician ▪ Plant engineer ▪ Welder/fabricator <p>Refresher specialist lorry mounted equipment</p>
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Day 3 - Module 10: Shotblasting - Off site training

Practical	Knowledge
Locate and identify the site from the jobsheet instructions and understand the hazards	Will have an understanding of and be able to interpret Method Statement, Risk Assessments, Drawings and recognise the importance of site inductions in relation to this module
Prepare a safe area of work cordon off using bunting tape and display safety signs Will be able to inspect plant and equipment prior to commencing work	Company policy relating to onsite activities
Safely unload the vehicle <ul style="list-style-type: none"> ▪ Using tail lift/trailer ramp ▪ By hand Using a forklift (when appropriate training received)	Will understand manual handling guidelines and kinetic lifting and the need for use of lifting aids
Attach ducting to shotblast machine and filtration unit Confirm suitable power supply <ul style="list-style-type: none"> ▪ 3 phase ▪ Single phase ▪ Connect to power source ▪ Check rotation of motors Select abrasive grade (shot) and place in the shotblast machine Start the filtration unit and shotblast machine Drive machine forward and release abrasive (shot) by opening the shot valve Adjust speed of travel and amount of abrasive released to achieve the required profile Progress works keeping lines straight and uniform Monitor profile adjust as required	Working time Appropriate PPE safety footwear, ear protection etc Method of use Types of surface How to prepare the surface without damaging and provide a profile suitable for the specified material Understand manufactures recommended procedures for setting up and operation of equipment Able to understand manufactures recommended operating and shut down procedure and general maintenance and care during operation The importance of keeping the site safe, clean and tidy throughout the operation Manufactures guidelines Have an understanding of the importance of defect reporting procedures

<p>Check wear on seals Assistant to sweep area magnet shot Shut down machine after use and check for defects before loading onto vehicle Empty dust boxes and dispose of debris in specified waste container Leave area clean and tidy Measure area Use of measuring wheel/devices Correctly complete a job record form/worksheet obtain client signature verifying recorded information Transport machine to vehicle Safely load equipment onto company transport Disconnect power supply</p>	<p>Environmental and Health and Safety issues with disposal of waste Will have an awareness of asbestos material and reporting procedures if its presence is suspected Manual Handling Regulations Understand why accurate measurement is important Working time regulations Manual Handling housekeeping lifting Correct storage of equipment, tools and accessories</p>
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Module 11: Planing

Day 1 - Off site training

Practical	Knowledge
<p>The Trainee will be able to select, draw from stores equipment, accessories and tools and safely load equipment onto company transport (refresher module 6)</p>	<p>Will have an understanding of and be able to interpret information from specification/job sheets</p>
<p>Power requirements and sources of power</p> <ul style="list-style-type: none"> ▪ 3 phase ▪ Single phase ▪ Generator ▪ Site supply 	<p>Understand precautions necessary when handling live power and actions to be taken in the event of accident.</p> <p>Types and sizes of Planing equipment and capabilities</p> <p>Types of flail and drum configurations applications and profiles achievable including depth of cut</p> <p>Have an understanding of the type of surface to be prepared, its composition and why this affects the choice of equipment and process.</p> <ul style="list-style-type: none"> ▪ Concrete ▪ Steel ▪ Asphalt ▪ Stone <p>Understand manufacturers guidelines for preparation suitable for the material to be applied</p> <ul style="list-style-type: none"> ▪ Coating ▪ Self leveller ▪ Screed <p>Have an understanding of materials to be removed</p> <ul style="list-style-type: none"> ▪ Coatings ▪ Adhesives

	<ul style="list-style-type: none"> ▪ Contaminates ▪ Self leveller
<p>Small Tools and accessories</p> <p>Will be able to inspect tools and equipment to ensure that they are safe and suitable for task in hand and follow employer defect reporting procedures</p>	<p>Electric extension cables, ducting, wheelbarrow, bucket, shovel, brush and safety signs</p> <p>Regulations affecting the process</p> <p>Will understand manual handling guidelines and kinetic lifting</p> <p>Will understand the need for use of lifting aids</p> <p>Identify pre-load procedures</p> <p>Will demonstrate how to secure equipment safely using straps</p>
<p>Select and wear the appropriate PPE for the task in hand</p> <p>Will be able to perform tasks during training in a safe manner</p>	<p>The Trainee will have an understanding or knowledge of:-</p> <p>The Health and Safety issues relating to this operation and what PPE is available to protect themselves in different working environments (plus obligation to wear PPE provided by employer under MHSWR etc</p> <p>The function of the appropriate PPE</p> <ul style="list-style-type: none"> ▪ safety footwear, high visibility clothing, head protection, eye protection, gloves, breathing masks ▪ their use storage and maintenance requirements <p>Will be able to interpret COSHH, Risk information from manufacturers Operators Manual to assist in choice of PPE, emergency actions in case of an accident and environmentally safe means of disposal</p> <p>Safe working practices with all equipment, tools in the work environment</p> <p>The importance of Method Statements and Risk Assessments in the safety process</p>
<p>Prepare equipment and tools for routine and predictable requirements, range of equipment to include:-</p> <ul style="list-style-type: none"> ▪ Planing machine ▪ Vacuum unit ▪ Generator <p>Safely run and operate powered equipment to include):-</p> <ul style="list-style-type: none"> ▪ Planing machine ▪ Vacuum unit ▪ Generator 	<p>Able to understand the manufacturers recommended general maintenance procedures and pre-start checks</p> <p>How to store and handle fuels such as diesel and oils and understand the relevant COSHH statements</p> <p>Able to understand manufacturers requirements when completing the operation in a safe manner, maintenance and care of equipment and tools</p> <p>Understand safety features</p> <p>Have an understanding of the range of Planing equipment and their operational capability and performance</p>
<p>Recognise faults and defects</p>	<p>How to carry visual checks for</p>

<p>Report and record equipment and defects</p> <p>Determine what can be done/repared safely by the operator (in accordance with company policy). Select correct parts, tools to carry out repair plus test repair before use.</p> <p>Shut down and carry out post stop checks on equipment to include</p> <ul style="list-style-type: none"> ▪ Planing machine ▪ Vacuum unit ▪ Generator 	<ul style="list-style-type: none"> ▪ Cables and plugs ▪ Worn seals ▪ Holes in hoses ▪ Correct water and oil levels ▪ Electrical switches ▪ Drums and flails ▪ Bearings and belts ▪ Setting up the machine to achieve optimum performance ▪ Holes in the body of the machine <p>Have an understanding and be able to adopt appropriate procedures for reporting and recording equipment and vehicle defects</p> <p>How to dismantle and clean</p> <p>Able to understand manufacturers recommended operating and shut down procedures and requirements for the general maintenance and care of equipment and tools</p> <p>Have an understanding of legislation and when to refer to a specialist i.e.</p> <ul style="list-style-type: none"> ▪ Qualified electrician ▪ Pant engineer ▪ Welder/fabricator <p>Refresher specialist lorry mounted equipment</p>
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Day 2 - Module 11: Planing - Off site training

Practical	Knowledge
<p>Locate and identify the site from the jobsheet instructions and understand the hazards</p>	<p>Will have an understanding of and be able to interpret Method Statement, Risk Assessments, Drawings and recognise the importance of site inductions in relation to this module</p>
<p>Prepare a safe area of work cordon off using bunting tape and display safety signs</p> <p>Will be able to inspect plant and equipment prior to commencing work</p>	<p>Company policy relating to onsite activities</p>
<p>Safely unload the vehicle</p> <ul style="list-style-type: none"> ▪ Using tail lift/trailer ramp ▪ By hand ▪ Using a forklift (when appropriate training received) 	<p>Will understand manual handling guidelines and kinetic lifting and the need for use of lifting aids</p>

<p>Attach ducting to planing machine and vacuum unit</p> <p>Confirm suitable power supply</p> <p>(in knowledge what about dangers of electrocution, precautions, what to do in event of accident, who to report to etc)</p> <ul style="list-style-type: none"> ▪ 3 phase ▪ Single phase ▪ Connect to power source ▪ Check rotation of motors <p>Select the appropriate drum and flail configuration and secure</p> <p>Start the vacuum and planing machine</p> <p>Lower drum to make contact with the surface and drive machine forward</p> <p>Adjust the depth of cut by lowering and heightening the drum to achieve the required profile</p> <p>Progress works keeping lines straight and uniform</p> <p>Monitor profile adjust as required</p> <p>Check wear on seals and remove loose debris from surface being prepared</p> <p>Assistant to sweep area</p> <p>Shut down machine after use and check for defects before loading onto vehicle</p> <p>Empty dust boxes and dispose of debris in specified waste container</p> <p>Leave area clean and tidy</p> <p>Measure area</p> <p>Use of measuring wheel/devices</p> <p>Correctly complete a job record form/worksheet obtain client signature verifying recorded information</p> <p>Transport machine to vehicle</p> <p>Safely load equipment onto company transport</p> <p>Disconnect power supply and safely stow any cables etc</p>	<p>Working time regulations</p> <p>Appropriate PPE safety footwear, ear protection etc</p> <p>Safe and efficient Method of use</p> <p>Types of surface e.g. concrete, stone, asphalt steel and:</p> <ul style="list-style-type: none"> ▪ Materials to be removed ▪ Materials to be applied and manufacturers guidelines ▪ Type of profile achievable and properties of flails <p>How to prepare the surface without damaging and provide a profile suitable for the specified material</p> <p>Understand manufacturers recommended procedures for setting up and operation of equipment</p> <p>Able to understand manufacturers recommended operating and shut down procedure and general maintenance and care during operation</p> <p>The importance of keeping the site safe, clean and tidy throughout the operation</p> <p>Manufacturers guidelines</p> <p>Have an understanding of the importance of defect reporting procedures</p> <p>Environmental and Health and Safety issues with disposal of waste</p> <p>Will have an awareness of asbestos material and reporting procedures if its presence is suspected</p> <p>Manual Handling Regulations</p> <p>Understand why accurate measurement is important</p> <p>Working time regulations</p> <p>Manual Handling housekeeping lifting</p> <p>Correct storage of equipment, tools and accessories</p>
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Module 12: Grinding**Day 1 - Off site training**

Practical	Knowledge
The Trainee will be able to select, draw from stores equipment, accessories and tools and safely load equipment onto company transport (refresher module 6)	Will have an understanding of and be able to interpret information from specification/job sheets
<p>Power requirements and sources of power</p> <ul style="list-style-type: none"> ▪ 3 phase ▪ Single phase ▪ Generator ▪ Site supply 	<p>Understand precautions necessary when handling live power and actions to be taken in the event of accident.</p> <p>Types and sizes of Grinding equipment and capabilities</p> <p>Types and sizes of diamond and resin bonded discs suitable for the selected grinding equipment, applications and grades</p> <p>Have an understanding of the type of surface to be prepared its composition and why this affects choice of equipment and process</p> <ul style="list-style-type: none"> ▪ Concrete ▪ Steel ▪ Asphalt ▪ Stone <p>Understand manufacturers guidelines for preparation suitable for the material to be applied</p> <ul style="list-style-type: none"> ▪ Coating ▪ Self leveller ▪ Screed <p>Have an understanding of materials to be removed</p> <ul style="list-style-type: none"> ▪ Coatings ▪ Adhesives ▪ Contaminates ▪ Self leveller
<p>Small Tools and accessories</p> <p>Will be able to inspect tools and equipment to ensure that they are safe and suitable for task in hand and follow employer defect reporting procedures</p>	<p>Electric extension cables, ducting, wheelbarrow, bucket, shovel, brush and safety signs</p> <p>Regulations affecting the process</p> <p>Will understand manual handling guidelines and kinetic lifting</p> <p>Will understand the need for use of lifting aids</p> <p>Identify pre-load procedures</p> <p>Will demonstrate how to secure equipment safely using straps</p>
<p>Select and wear the appropriate PPE for the task in hand</p> <p>Will be able to perform tasks during training in a safe</p>	<p>The Trainee will have an understanding or knowledge of:-</p> <p>The Health and Safety issues relating to this</p>

<p>manner</p>	<p>operation and what PPE is available to protect themselves in different working environments (plus obligation to wear PPE provided by employer under MHSWR etc</p> <p>The function of the appropriate PPE</p> <ul style="list-style-type: none"> ▪ safety footwear, high visibility clothing, head protection, eye protection, gloves, breathing masks ▪ their use storage and maintenance requirements <p>Will be able to interpret COSHH, Risk information from manufacturers Operators Manual to assist in choice of PPE, emergency actions in case of an accident and environmentally safe means of disposal</p> <p>Safe working practices with all equipment, tools in the work environment</p> <p>The importance of Method Statements and Risk Assessments in the safety process</p>
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Day 2 - Module 12: Grinding - Off site Training

<p>Prepare equipment and tools for routine and predictable requirements, range of equipment to include:-</p> <ul style="list-style-type: none"> ▪ Grinding machine ▪ Vacuum unit ▪ Generator <p>Safely run and operate powered equipment to include:)-</p> <ul style="list-style-type: none"> ▪ Grinding machine ▪ Vacuum unit ▪ Generator 	<p>Able to understand the manufacturers recommended general maintenance procedures and pre-start checks</p> <p>How to store and handle fuels such as diesel and oils and understand the relevant COSSH statements</p> <p>Able to understand manufacture's requirements when completing the operation in a safe manner, maintenance and care of equipment and tools</p> <p>Understand safety features</p> <p>Have an understanding of the range of Grinding equipment and their operational capability and performance</p>
<p>Recognise faults and defects</p> <p>Report and record equipment and defects</p> <p>Determine what can be done/repared safely by the operator (in accordance with company policy).</p> <p>Select correct parts, tools to carry out repair plus test repair before use</p> <p>Shut down and carry out post stop checks on equipment to include</p> <ul style="list-style-type: none"> ▪ Grinding machine ▪ Vacuum unit ▪ Generator 	<p>How to carry visual checks for</p> <ul style="list-style-type: none"> ▪ Cables and plugs ▪ Worn seals ▪ Holes in hoses ▪ Correct water and oil levels ▪ Electrical switches ▪ Diamond discs ▪ Securing discs correctly ▪ Adjustments to ensure even wear ▪ Bearings and belts ▪ Holes in the body of the machine <p>Have an understanding and be able to adopt appropriate procedures for reporting and recording</p>

	<p>equipment and vehicle defects</p> <p>How to dismantle and clean</p> <p>Able to understand manufacturers recommended operating and shut down procedures and requirements for the general maintenance and care of equipment and tools</p> <p>Have an understanding of legislation and when to refer to a specialist i.e.</p> <ul style="list-style-type: none"> ▪ Qualified electrician ▪ Plant engineer ▪ Welder/fabricator <p>Refresher specialist lorry mounted equipment</p>
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Module 13: Prepare Background Surfaces - Polishing

Days 1 & 2 Off site training

This training module is intended to provide the apprentice with awareness of the principals and techniques involved in polishing using Grinding equipment.

Practical	Knowledge
<p>Principal of operation (overview)</p> <p>Select, use, maintain and store correct PPE eye protection, ear protection, gloves and foot protection</p> <p>Ability to interpret job specification and product data sheets for Health and Safety and environmental issues relating to water and chemicals</p> <p>Employ correct storage and handling of chemicals in line with data sheets and Health and Safety information</p>	<p>The different types and sizes of grinding equipment and tools</p> <p>Trainee will understand Health and Safety requirements for chemicals and water use, including risks to persons and the correct PPE</p> <ul style="list-style-type: none"> ▪ Eye protection ▪ Ear protection ▪ Gloves ▪ Foot protection <p>Risk of incorrect use of chemicals</p>
<p>Select the correct diamond or Resin Bonded disc for the specified stage of the polishing operation</p> <p>Attach disc(s) securely to grinding machine</p>	<p>The different types and grades of diamonds and their functions/capabilities</p> <p>Identify different types of surfaces/materials which require polishing</p> <p>Understand manufacturers recommendations to meet the required specification</p>
<p>The different stages of the process</p>	<p>The British Standard of polishing</p> <p>Will understand the importance of the correct selection of discs</p> <p>Understand reasons for:-</p> <ul style="list-style-type: none"> ▪ Wet grinding/polishing ▪ Dry grinding/polishing <p>Consequences of incorrect disc selection</p> <p>How to test finish achieved against required specification</p>

Module 14: Prepare Background Surfaces Multi StrippingDay 1 - Off site training

Practical	Knowledge
The Trainee will be able to select, draw from stores equipment, accessories and tools and safely load equipment onto company transport (refresher module 6)	Will have an understanding of and be able to interpret information from specification/job sheets
<p>Power requirements and sources of power</p> <ul style="list-style-type: none"> ▪ 3 phase ▪ Single phase ▪ Generator ▪ Diesel engines ▪ Gas powered equipment 	<p>Understand precautions necessary when handling live power and actions to be taken in the event of accident.</p> <p>Types and sizes of Multi Stripping equipment and capabilities</p> <p>Types and sizes of blades and accessories</p> <p>Have an understanding of the type of surface to be removed</p> <ul style="list-style-type: none"> ▪ Screed ▪ Self leveller ▪ Latex ▪ Adhesive ▪ Soft flooring materials ▪ Tiles ▪ Contaminates ▪ Coatings ▪ Adhesives ▪ Self leveller ▪ Screed
<p>Select and wear the appropriate PPE for the task in hand</p> <p>Will be able to perform tasks during training in a safe manner</p>	<p>The Trainee will have an understanding or knowledge of:-</p> <p>The Health and Safety issues relating to this operation and what PPE is available to protect themselves in different working environments (plus obligation to wear PPE provided by employer under MHSWR etc</p> <p>The function of the appropriate PPE</p> <ul style="list-style-type: none"> ▪ safety footwear, high visibility clothing, head protection, eye protection, gloves, breathing masks ▪ their use storage and maintenance requirements <p>Will be able to interpret COSHH, Risk information from manufacturers Operators Manual to assist in choice of PPE, emergency actions in case of an accident and environmentally safe means of disposal</p> <p>Safe working practices with all equipment, tools in</p>

	<p>the work environment</p> <p>The importance of Method Statements and Risk Assessments in the safety process</p>
<p>Prepare equipment and tools for routine and predictable requirements, range of equipment to include:-</p> <ul style="list-style-type: none"> ▪ Multi Stripping machine ▪ Generator <p>Safely run and operate powered equipment to include:)-</p> <ul style="list-style-type: none"> ▪ Multi Stripping machine ▪ Vacuum unit ▪ Generator 	<p>Able to understand the manufacturers recommended general maintenance procedures and pre-start checks</p> <p>How to store and handle fuels such as diesel and oils and understand the relevant COSHH statements</p> <p>Able to understand manufacturers requirements when completing the operation in a safe manner, maintenance and care of equipment and tools</p> <p>Understand safety features</p> <p>Have an understanding of the range of Multi Stripping equipment and their operational capability and performance</p>
<p>Recognise faults and defects</p> <p>Report and record equipment and defects</p> <p>Determine what can be done/repared safely by the operator (in accordance with company policy).</p> <p>Select correct parts, tools to carry out repair plus test repair before use</p> <p>Shut down and carry out post stop checks on equipment to include</p> <ul style="list-style-type: none"> ▪ Planing machine ▪ Vacuum unit ▪ Generator 	<p>How to carry visual checks for</p> <ul style="list-style-type: none"> ▪ Cables and plugs ▪ Worn seals ▪ Holes in hoses ▪ Correct water and oil levels ▪ Electrical switches ▪ Diesel engines ▪ Gas powered equipment ▪ Accessories and correct procedure to secure/replace ▪ Holes in the body of the machine <p>Have an understanding and be able to adopt appropriate procedures for reporting and recording equipment and vehicle defects</p> <p>How to dismantle and clean</p> <p>Able to understand manufacturers recommended operating and shut down procedures and requirements for the general maintenance and care of equipment and tools</p> <p>Have an understanding of legislation and when to refer to a specialist i.e.</p> <ul style="list-style-type: none"> ▪ Qualified electrician ▪ Pant engineer ▪ Welder/fabricator <p>Refresher specialist lorry mounted equipment</p>

Day 2 - Module 14: Multi Stripping - Off site training

Practical	Knowledge
Locate and identify the site from the jobsheet instructions and understand the hazards	Will have an understanding of and be able to interpret Method Statement, Risk Assessments,

	Drawings and recognise the importance of site inductions in relation to this module
<p>Prepare a safe area of work cordon off using bunting tape and display safety signs</p> <p>Will be able to inspect plant and equipment prior to commencing work</p>	Company policy relating to onsite activities
<p>Safely unload the vehicle</p> <ul style="list-style-type: none"> ▪ Using tail lift/trailer ramp ▪ By hand ▪ Using a forklift (when appropriate training received) 	Will understand manual handling guidelines and kinetic lifting and the need for use of lifting aids
<p>Attach ducting to multi stripping machine and filtration unit</p> <p>Confirm suitable power supply</p> <ul style="list-style-type: none"> ▪ 3 phase ▪ Single phase ▪ Connect to power source ▪ Check rotation of motors <p>Select the blade or accessory and secure in the blade holder</p> <p>Start the multi stripping machine</p> <p>Drive machine forward machine forward and adjust the angle of blade/accessories</p> <p>Adjust the speed of travel and/or select alternative blade/accessory to effect efficient removal of the specified material</p> <p>Progress works keeping lines straight and uniform</p> <p>Monitor to ensure uniform results are achieved</p> <p>Ensure debris created is cleared at regular intervals by assistants and keep clear of the path of the operating machine</p> <p>Shut down machine after use and check for defects before loading onto vehicle</p> <p>Dispose of debris in specified waste container</p> <p>Leave area clean and tidy</p> <p>Measure area</p> <p>Use of measuring wheel/devices</p> <p>Correctly complete a job record form/worksheet obtain client signature verifying recorded information</p> <p>Transport machine to vehicle</p> <p>Safely load equipment onto company transport</p>	<p>Working time regulations</p> <p>Appropriate PPE safety footwear, ear protection etc</p> <p>Safe and efficient Method of use</p> <p>Types of surface e.g. concrete, stone, asphalt steel and:</p> <ul style="list-style-type: none"> ▪ Materials to be removed ▪ Materials to be applied and manufacturers guidelines ▪ Type of profile achievable and properties of flails <p>How to prepare the surface without damaging and provide a profile suitable for the specified material</p> <p>Understand manufacturers recommended procedures for setting up and operation of equipment</p> <p>Able to understand manufacturers recommended operating and shut down procedure and general maintenance and care during operation</p> <p>The importance of keeping the site safe, clean and tidy throughout the operation</p> <p>Manufacturers guidelines</p> <p>Have an understanding of the importance of defect reporting procedures</p> <p>Environmental and Health and Safety issues with disposal of waste</p> <p>Will have an awareness of asbestos material and reporting procedures if its presence is suspected</p> <p>Manual Handling Regulations</p> <p>Understand why accurate measurement is important</p> <p>Working time regulations</p> <p>Manual Handling housekeeping lifting</p> <p>Correct storage of equipment, tools and accessories</p>

Apprenticeship Module	Health & Safety Awareness	Core	Introduction to Surface Preparation	Work Practice & Project Planning	Manual Handling & Vehicle Offloading	Abrasive & Diamond Wheels	Shotblasting	Planing	Grinding	Polishing	Multi-Stripping	First Aid Appointed Person
NVQ Unit number												
VR 01	y	y						y	y	y	y	
Elements 4	1,2,3,4	1,2,3						1,2,3	1,2,3	1,2,3	1,2,3	
VR 02	y	y						y	y	y	y	
Elements 3	3,	1,2,3						1,2,3	1,2,3	1,2,3	1,2,3	
VR 03	y	y						y	y	y	y	
Elements 4	1	1,2,4						1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	
VR 01	y	y	y	y	y	y	y	y	y	y	y	y
Elements	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	2,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4,	1,2,3,4,	1,2,3,4	2,4
VR 02	y	y	y	y	y	y	y	y	y	y	y	y
Elements	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	2	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	3
VR 03	y	y	y	y	y	y	y	y	y	y	y	y
Elements	1,3	1,3,4	1,2,3,4	1,2,3,4	1,4	1	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1
VR 359	y	y	y	y	y	y	y	y	y	y	y	
Elements	2,4	2,4	1,2,3,4,5,6	1,2,3,4,5,6	1,2	2,3	1,2,3,4,5,6	1,2,3,4,5,6	1,2,3,4,5,6	1,2,3,4,5,6	1,2,3,4,5,6	
VR 400	1,2,5,6	1,2,5,6	1,2,3,4,5,6	1,2,3,4,5,6	1,2	1,2,3	1,2,3,4,5,6	1,2,3,4,5,6	1,2,3,4,5,6	1,2,3,4,5,6	1,2,3,4,5,6	
Elements												

**Prepare & Profile Substrates
Apprenticeship Pilot Scheme**

EMPLOYER ENDORSEMENT SECTION

Company Name: _____

Name of Manager: _____

Signature: _____

Position in Company: _____

Please complete the relevant sections below

Has the employee communicated in a proper manner? YES/NO

Maintained appropriate company records, for example job record sheets, H & S records, defects reports etc YES/NO

Has the employee carried out work in a safe and efficient manner? YES/NO

Has the employee conformed to company and industry legislation and procedures? YES/NO

Has the employee set up, operated and shut down machines or Equipment in a safe condition as per manufacturers' instruction? YES/NO

Has the employee attained a satisfactory standard of workmanship in all relevant modules? YES/NO

Managers comments:

Prepare & Profile Substrates Construction Apprenticeship Scheme

Provider

FeRFA
The Resin Flooring Association
16 Edward Road
Farnham
Surrey
GU9 8NP

Contact Helen McGachie
Lisa Hennessey
Tel: 01252 714250
secretariat@ferfa.org.uk

Training Available at the following locations:

- The Preparation Group
Preparation House, Deacon Road, Lincoln LN2 4JB
- SPE International Ltd
Honeyholes Lane, Dunholme, Lincoln LN2 3SU

Training Provision Capacity

Quarterly programme starts with a capacity of 6 trainees per start.

Prepare & Profile Substrates Construction Apprenticeship Scheme

Instructor Profile

Experience

- Minimum of five years practical experience of surface preparation activities together with the equipment used.
- Minimum of two years at supervisory or management level in a surface preparation organisation.
- The design and delivery of training courses in construction topics, i.e. presentational skills.

Qualifications

- Ideally possession of an NVQ Level 2 Prepare & Profile Substrates and possession of a CSCS Skilled Worker Card in Prepare & Profile Substrates/FeRFA ID Badge.
- Qualified NVQ Assessor in surface preparation
- Passed CITB Health & Safety Test or recognized safety course.

General

- Possession of a current driving licence.
- Evidence of computer literacy, numeracy and general literacy.
- Experience in maintenance and repair of surface preparation equipment

Employer Competent Person Profile

- 2 years sector experience, have an understanding of the NVQ system and hold the relevant CSCS card. In addition it is a requirement that the competent person will have received Work Based recorder training.
- The training provider will ensure that suitable instruction & advice is made available to the competent person to ensure quality and consistency throughout the scheme.