**Victorian Purchasing Guide**

**for**

**PMB Plastics Rubber and Cablemaking
Training Package**

**Release 2.0**

**March 2021**

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Victorian Purchasing Guide ⎯ Release History

**Note**: RTOs should refer to the National Register for the detail of changes made in each Release. (See [National Register](https://training.gov.au/Home/Tga) for more information)

| Training Package Release  | **Date VPGApproved** | Comments |
| --- | --- | --- |
| PMB Plastics, Rubber and CablemakingTraining PackageRelease 2.0 | 29 March 2021 | Release 2.0 of the PMB Plastics, Rubber and Cablemaking Training Package reflects a substantial revision to reflect current industry best practice, improve relevance and reduce duplication across units of competency. 126 units have been revised, with the addition of two new units:* PMBPROD243E Cut rubber materials.
* PMBTECH407E Produce composite products using cored-laminate techniques.

The following obsolete qualification, along with 52 units, have been deleted:PMB60116 - Advanced Diploma of Polymer TechnologyFor detailed mapping of qualifications and units between PMB Release 2 and PMB Release 1 please refer to the PMB Plastics, Rubber and Cablemaking Training Package Implementation Guide [Companion Volume](https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=932aacef-7947-4c80-acc6-593719fe4090) |
| PMB Plastics, Rubber and Cablemaking Training PackageRelease 1.0 | 4 August2016 | Release 1 of the PMB Plastics, Rubber and Cablemaking Training Package consolidates all qualifications from the PMB07 Training PackageFor detailed mapping of qualifications and units between PMB Release 1 and PMB07 please refer to the PMB Plastics, Rubber and Cablemaking Training Package Implementation Guide [Companion Volume](https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=932aacef-7947-4c80-acc6-593719fe4090) |

**PMB Plastics, Rubber and Cablemaking**
**Training Package Release 2
Victorian Purchasing Guide**

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INTRODUCTION

What is a Victorian Purchasing Guide?

The Victorian Purchasing Guide provides information for use by Registered Training Organisations (RTOs) in the provision of Victorian government subsidised training.

Specifically the Victorian Purchasing Guide provides the following information related to the delivery of nationally endorsed Training Packages in Victoria:

* The maximum and minimum payable hours available for each qualification.
* Nominal hours for each unit of competency within the Training Package.

Registration

RTOs must be registered by either the Victorian Registration and Qualifications Authority (VRQA) or the Australian Skills Qualification Authority (ASQA) regulatory body to be eligible to issue qualifications and Statements of Attainment under the Australian Qualifications Framework (AQF).

The VRQA is the regulatory authority in Victoria responsible for the registration of Vocational Education and Training (VET) providers who offer courses to domestic students in Victoria only.

ASQA is the regulatory authority responsible for the registration of VET providers who offer training in Victoria, nationally and / or internationally.

Transition

The relationship between new units and any superseded or replaced units from the previous version of **PMB Plastics, Rubber and Cablemaking** **Training Package** is provided in theTraining PackageCompanionVolume Implementation Guide. (See [Companion Volumes](https://vetnet.education.gov.au/Pages/default.aspx) for more information).

Information regarding transition arrangements can be obtained from the state or national VET Regulatory Authority (see Contacts and Links section).

RTOs must ensure that all training and assessment leading to issuance of qualifications or Statements of Attainment from the **PMB Plastics, Rubber and Cablemaking** **Training Package Release 2.0** is conducted against the Training Package units of competency and complies with the assessment requirements.

QUALIFICATIONS

| **Code** | **Title** | **Minimum Payable Hours** | **Maximum Payable Hours** |
| --- | --- | --- | --- |
| PMB20121 | Certificate II in Polymer Processing | 475 | 500 |
| PMB30121 | Certificate III in Polymer Processing | 817 | 860 |
| PMB40121 | Certificate IV in Polymer Technology | 1178 | 1240 |
| PMB50121 | Diploma of Polymer Technology | 998 | 1050 |

UNITS OF COMPETENCY AND NOMINAL HOURS

| Unit Code | Unit Title | Nominal Hours |
| --- | --- | --- |
| PMBFIN201E | Finish components and products | 30 |
| PMBFIN202E | Fit attachments and assemble components for customised polymer products | 30 |
| PMBFIN203E | Rework product imperfections | 30 |
| PMBFIN205E | Hand decorate products | 40 |
| PMBHAN103E | Shift materials safely by hand | 20 |
| PMBPREP201E | Prepare moulds for composites production | 30 |
| PMBPREP205E | Assemble materials and equipment for production | 30 |
| PMBPREP206E | Prepare polymer materials to specified formulae | 30 |
| PMBPREP301E | Set up and prepare for batch production | 30 |
| PMBPREP303E | Set up equipment for continuous operation | 30 |
| PMBPREP304E | Set a die for injection moulding production | 50 |
| PMBPREP305E | Change extrusion die and calibrator | 50 |
| PMBPROD206E | Operate ancillary equipment | 40 |
| PMBPROD207E | Operate rubber calendering equipment | 70 |
| PMBPROD209E | Operate cable winding equipment | 40 |
| PMBPROD210E | Operate injection moulding equipment | 70 |
| PMBPROD213E | Operate polymer extruders | 70 |
| PMBPROD216E | Operate blown film equipment | 70 |
| PMBPROD217E | Operate printing equipment | 40 |
| PMBPROD221E | Operate rotational moulding equipment | 60 |
| PMBPROD235E | Use materials and process knowledge to complete work operations | 50 |
| PMBPROD236E | Operate hand-held air or power equipment for production processes | 40 |
| PMBPROD238E | Perform creel rack operations for belting production | 30 |
| PMBPROD239E | Build fabric-reinforced conveyor belts | 40 |
| PMBPROD240E | Cut plastic materials | 30 |
| PMBPROD241E | Install rubber lining or pulley lagging using lay-up techniques | 30 |
| PMBPROD242E | Bond polymers to surfaces | 40 |
| PMBPROD243E | Cut rubber materials  | 30 |
| PMBPROD245E | Fabricate products with rubber or plastics | 40 |
| PMBPROD246E | Hand mix materials | 20 |
| PMBPROD247E | Create composite laminates using hand lay-up techniques | 60 |
| PMBPROD248E | Prepare surfaces for coating | 20 |
| PMBPROD249E | Apply liquid surface coatings | 30 |
| PMBPROD251E | Apply gel coat or other polymer surface finish | 30 |
| PMBPROD252E | Operate polymer compounding equipment | 50 |
| PMBPROD253E | Operate an internal mill blender | 30 |
| PMBPROD254E | Operate an open mill blender | 30 |
| PMBPROD255E | Operate polymer mixing equipment | 30 |
| PMBPROD261E | Operate continuous vulcanising equipment | 30 |
| PMBPROD265E | Operate portable vulcanising equipment | 20 |
| PMBPROD280E | Operate a chopper gun to lay-up composites | 40 |
| PMBPROD281E | Finish composite products | 40 |
| PMBPROD282E | Reassemble production mould components | 20 |
| PMBPROD283E | Demould polymer products | 30 |
| PMBPROD287E | Weld thermoplastics materials | 50 |
| PMBPROD293E | Create composite laminates using vacuum-assisted closed-moulding processes | 40 |
| PMBPROD300E | Produce products | 40 |
| PMBPROD301E | Draw wire | 40 |
| PMBPROD302E | Bunch and strand wire | 40 |
| PMBPROD303E | Produce cable and tape lay-up cables | 40 |
| PMBPROD304E | Wind up wire or belts | 20 |
| PMBPROD306E | Prepare and start equipment for production | 30 |
| PMBPROD307E | Produce calendered rubber or vinyl products | 70 |
| PMBPROD308E | Take a machine out of production | 30 |
| PMBPROD310E | Produce injection moulded products | 60 |
| PMBPROD311E | Produce blow moulded products | 60 |
| PMBPROD313E | Produce extruded polymer products | 60 |
| PMBPROD316E | Produce blown film | 60 |
| PMBPROD321E | Produce rotational moulded products | 60 |
| PMBPROD325E | Lay on tyre retreads | 20 |
| PMBPROD326E | Inspect tyres | 20 |
| PMBPROD328E | Produce sheet-fed vacuum-formed products | 50 |
| PMBPROD330E | Make moulds for thermoformed products | 50 |
| PMBPROD336E | Inspect heavy off-the-road tyres | 20 |
| PMBPROD337E | Prepare heavy off-the-road tyres for repair | 40 |
| PMBPROD338E | Repair heavy off-the-road tyres | 60 |
| PMBPROD339E | Produce steel cord-reinforced conveyor belts | 50 |
| PMBPROD340E | Cure heavy off-the-road tyre repairs | 60 |
| PMBPROD341E | Finish heavy off-the-road tyre repairs | 20 |
| PMBPROD343E | Shut down plant area | 20 |
| PMBPROD347E | Mould composites products using hand lay-up techniques | 50 |
| PMBPROD352E | Produce compounded materials | 40 |
| PMBPROD355E | Make pattern or plug for composites moulds | 80 |
| PMBPROD356E | Construct moulds for composite products | 60 |
| PMBPROD357E | Construct jigs and fixtures | 40 |
| PMBPROD358E | Develop polymer product patterns | 60 |
| PMBPROD360E | Produce polyurethane products using centrifugal casting | 50 |
| PMBPROD362E | Produce polyurethane products using gravity casting | 50 |
| PMBPROD367E | Remove and replace conveyor belts | 20 |
| PMBPROD368E | Repair conveyor belt carcasses | 30 |
| PMBPROD369E | Repair conveyor belt covers | 30 |
| PMBPROD370E | Produce injection blow moulded products | 70 |
| PMBPROD375E | Vulcanise products using an autoclave | 40 |
| PMBPROD376E | Splice steel cord conveyor belts | 40 |
| PMBPROD377E | Splice fabric ply conveyor belts | 40 |
| PMBPROD378E | Splice solid woven conveyor belts | 40 |
| PMBPROD380E | Produce composites products using mechanised open mould wet lay-up | 50 |
| PMBPROD384E | Operate multi-axis router | 60 |
| PMBPROD385E | Program computer-controlled equipment | 40 |
| PMBPROD390E | Produce composites using filament winding | 40 |
| PMBPROD391E | Produce composites using resin infusion | 30 |
| PMBPROD392E | Produce thermoset composites using pultrusion | 30 |
| PMBPROD393E | Produce composites using vacuum bagging | 40 |
| PMBPROD394E | Produce composites using resin transfer moulding | 30 |
| PMBPROD398E | Produce composites using prepregs | 30 |
| PMBPROD430E | Trial a new injection moulding die | 60 |
| PMBPROD431E | Trial a new production mould assembly | 40 |
| PMBTECH301E | Optimise polymer processing operations | 40 |
| PMBTECH302E | Modify existing compounds | 40 |
| PMBTECH303E | Make minor modifications to products | 40 |
| PMBTECH401E | Predict polymer properties and characteristics | 60 |
| PMBTECH402E | Set advanced or complex injection moulding dies | 60 |
| PMBTECH403E | Test thermoset composite laminates and materials | 40 |
| PMBTECH404E | Mould composites with chemically-resistant or fire-retardant properties | 40 |
| PMBTECH405E | Repair damaged fibre-composites structures | 50 |
| PMBTECH406E | Diagnose production equipment problems | 50 |
| PMBTECH407E | Produce composite products using cored-laminate techniques | 40 |
| PMBTECH501E | Analyse equipment performance | 50 |
| PMBTECH502E | Analyse production trials | 60 |
| PMBTECH505E | Choose polymer materials for an application | 50 |
| PMBTECH506E | Analyse the design of products and tools for polymer injection moulding | 80 |
| PMBTECH507E | Develop fibre-composite products using cored-laminate techniques | 70 |
| PMBTECH508E | Develop a new compound | 60 |
| PMBTECH509E | Modify an existing product | 50 |
| PMBTECH601E | Develop a new product | 100 |
| PMBTECH602E | Develop a new die or tool | 150 |
| PMBTECH603E | Design structural or mechanical polymer components | 100 |
| PMBWELD301E | Join polyethylene plastic pipelines using butt welding | 20 |
| PMBWELD302E | Join polyethylene plastic pipelines using electrofusion welding | 20 |
| PMBWELD303E | Install polyethylene plastic pipelines for non-pressure drainage | 20 |
| PMBWELD304E | Design polyethylene plastic pipelines for non-pressure drainage | 20 |
| PMBWELD305E | Install polyethylene plastic pipelines for pressurised applications | 20 |
| PMBWELD306E | Design polyethylene plastic pipelines for pressurised applications | 20 |
| PMBWELD307E | Install plastic pipelines for high temperature applications | 30 |
| PMBWELD308E | Install PVC plastic pipelines for pressurised applications | 20 |
| PMBWELD309E | Weld plastic using extrusion techniques | 20 |
| PMBWELD310E | Design PVC plastic pipelines for pressure applications | 20 |
| PMBWELD311E | Design plastic pipelines for high temperature and pressure applications | 20 |

CONTACTS AND LINKS

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| **Curriculum Maintenance Manager (CMM)** |
| General Manufacturing | The CMM Service is provided on behalf of Higher Education and Skills.CMM Service Executive Officers can assist with questions on payable and nominal hours. | Name: Paul Saunders Address: Chisholm Institute, PO Box 684, Dandenong, Victoria, 3175.Phone: 03 9238 8448Email: paul.saunders@chisholm.edu.au |
| **Service Skills Organisation (SSO)** |
| Innovation and Business Skills Australia (IBSA) | This SSO is responsible for developing this **PMB Plastics Rubber and Cablemaking Training Package** and can be contacted for further information.  | Phone: 03 9815 7099Email: manufacturing@ibsa.org.auSee [SSO website](https://ibsa.org.au/) for further information. |
| **National Register for VET in Australia** |
| Training.gov.au (TGA) | TGA is the Australian government’s official National Register of information on Training Packages, qualifications, courses, units of competency and RTOs. | See the [National Register](http://training.gov.au/) for more information. |
| **Australian Government** |
| Department of Education, Skills and Employment | The Commonwealth Department is responsible for national policies and programmes that help Australians access quality vocational education and training.  | See the [Commonwealth Department of Education, Skills and Employment website](https://www.dese.gov.au/) for more information.  |
| **State Government** |
| Department of Education and Training (DET)  | DET is the State Training Authority responsible for supporting implementation of Vocational Education and Training (VET) in Victoria.  | (03) 9637 2000See the [Victorian Department of Education and Training website](http://www.education.vic.gov.au/) for more information. |
| **National VET Regulatory Authority** |
| Australian Skills Quality Authority (ASQA) | ASQA is the national regulator for Australia’s VET sector.  | Info line: 1300 701 801 See the [ASQA website](http://www.asqa.gov.au/) for more information. |
| **Victorian State VET Regulatory Authority** |
| Victorian Registration and Qualifications Authority (VRQA) | The VRQA is a statutory authority responsible for the registration and regulation of Victorian RTOs and for the regulation of apprenticeships and traineeships in Victoria. | (03) 9637 2806 See the [VRQA website](http://www.vrqa.vic.gov.au/) for more information.  |

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| **Industry Regulatory Bodies** |
| WorkSafe Victoria | The industry Regulatory body can provide advice on licensing, legislative or regulatory requirements which may impact on the delivery of training or the issuance of qualifications in this Training Package. WorkSafe needs to provide written verification before High Risk Work Units can be added to an RTO’s scope of registration. | Address: 222 Exhibition Street, Melbourne, 3000. Phone: (03) 9641 1444 or 1800 136 089 (toll free)Email: Here. See [Worksafe Victoria’s](http://www.worksafe.vic.gov.au/) website for further information.  |

GLOSSARY

|  |  |
| --- | --- |
| **Code** | Nationally endorsed Training Package qualification code. |
| **Title** | Nationally endorsed Training Package qualification title. |
| **Unit Code** | Nationally endorsed Training Package unit code. |
| **Unit Title** | Nationally endorsed Training Package unit title. |
| **Maximum Payable Hours** | The maximum number of hours the Victorian Government will subsidise under Skills First funding for the achievement of the minimum realistic vocational outcome of the qualification, as determined by the qualification packaging rules.  The Maximum Payable Hours do not cover every possible combination of core and elective units available for a specific qualification.   Minimum payable hours reflect a calculated minimum number of hours that could deliver a minimum realistic vocational outcome, based on efficiencies of contextualisation and integration. |
| **Scope of Registration** | Scope of registration specifies the AQF qualifications and/or units of competency the training organisation is registered to issue and the industry training and/or assessment services it is registered to provide. |
| **Nominal Hours** | Nominal hours reflect the anticipated time taken to deliver and assess the outcomes of a unit of competency excluding unsupervised delivery or the time taken for repeated practical application of skills. Nominal hours are determined by the Victorian State Training Authority (DET) and are primarily developed for funding purposes in Victoria. |