Please find below our current Masterspec Specification for Viking CertainTeed Shingles.

Our focus is to ensure that you have the right information and technical support required to make specifying our roofing and waterproofing solutions easy.

If you require any of our CAD details you can find them on our website [www.vikingroofspec.co.nz](http://www.vikingroofspec.co.nz)

For any further support please do not hesitate to contact us on 0800 729 799.

Kind Regards,

The team at Viking Roofspec



T: 0800 729 799

F: 0800 729 788

info@vikingroofspec.co.nz

[www.vikingroofspec.co.nz](http://www.vikingroofspec.co.nz)

# 4371VC VIKING CERTAINTEED ASPHALT SHINGLE ROOFING

## 1. GENERAL

 If you have pre-customised this work section using the "questions and answers" provided as part of the downloading process, it may be necessary to amend some clauses to suit the final project-specific version.

 The section must still be checked and customised to suit the project being specified, by removing any other irrelevant details and adding project-specific details and selections.

 This section relates to the supply and installation of **Viking CertainTeed** asphalt shingles installed over a substrate and roofing underlay to create a weather tight roofing system:

 - complete with all roof underlays, flashings and accessories

 - where the roof slope is 9° or greater

 - available in five profile types

 - an alternative solution in terms of the [New Zealand Building Code](http://www.masterspec.co.nz/redirect.aspx?pl=2046)

 Modify or extend the above description to suit the project being specified. The shingles are combined with plywood sheathing, a roofing underlay and various flashing accessories to form a roofing system.

 This section includes general clauses relating to the supply and installation of the required substrate. Delete these clauses if the substrate is specified elsewhere, for example in 4337 PLYWOOD ROOFING AND DECKING section, or expand the clauses to suit the project specified.

### 1.1 RELATED WORK

 Refer to 7411 RAINWATER SPOUTING SYSTEMS for rainwater disposal.

 Include cross references to other sections where these contain related work.

 This section does not include for rainwater gutters, spouting and pipework. Some flashing work is also often covered elsewhere.

 **Documents**

### 1.2 DOCUMENTS

 Refer to the general section 1233 REFERENCED DOCUMENTS. The following documents are specifically referred to in this section:

 [NZBC B1](http://www.masterspec.co.nz/redirect.aspx?pl=222)/AS1 Structure

 [NZBC B2](http://www.masterspec.co.nz/redirect.aspx?pl=223)/AS1 Durability

 [NZBC E2](http://www.masterspec.co.nz/redirect.aspx?pl=347)/AS1 External moisture

 [AS/NZS 1170](http://www.masterspec.co.nz/redirect.aspx?pl=268) Structural design actions

 AS 1397 Continuous hot-dip metallic coated steel sheet and strip - Coatings of zinc and zinc alloyed with aluminium and magnesium

 [AS/NZS 2269.0](http://www.masterspec.co.nz/redirect.aspx?pl=1046) Plywood - Structural - Specifications

 [NZS 3603](http://www.masterspec.co.nz/redirect.aspx?pl=300) Timber structures standard

 [NZS 3604](http://www.masterspec.co.nz/redirect.aspx?pl=301) Timber-framed buildings

 [AS/NZS 4680](http://www.masterspec.co.nz/redirect.aspx?pl=1176) Hot-dip, galvanized (zinc) coatings on fabricated ferrous articles

 Delete from the DOCUMENTS clause any document not cited. List any additional cited documents.

 The following are related documents and if referred to in the work section need to be added to the list of DOCUMENTS.

 [NZBC F2](http://www.masterspec.co.nz/redirect.aspx?pl=236)/AS1 Hazardous building materials

 BRANZ BU 443 Timber shingles and shakes

 BRANZ BU 567 E2/AS1 Flashing Requirements

 [AS/NZS 1170.2](http://www.masterspec.co.nz/redirect.aspx?pl=1110) Structural design actions - Wind actions

 [NZS 1170.5](http://www.masterspec.co.nz/redirect.aspx?pl=872) Structural design actions - Earthquake actions - New Zealand standards

 Check with Viking Roofspec to ensure that you have the most up to date information.

### 1.3 MANUFACTURER/SUPPLIER DOCUMENTS

 Manufacturer's and supplier's documents relating to this part of the work:

 Viking Roofspec CertainTeed Shingles Manual

 [BRANZ Appraisal 276](http://www.masterspec.co.nz/redirect.aspx?pl=1200) - Viking CertainTeed Asphalt Roofing Shingles

 [BRANZ Appraisal 703](http://www.masterspec.co.nz/redirect.aspx?pl=2050) - Strandboard Sarking

 JukenNew Zealand Ltd Superstrand Sarking Technical Manual

 Manufacturer/supplier contact details

 Company: Viking Roofspec

 Web: [www.vikingroofspec.co.nz](http://www.vikingroofspec.co.nz)

 Email: info@vikingroofspec.co.nz

 Telephone: 0800 729 799

 Facsimile: 0800 729 788

 It is important to ensure that all personnel on site have access to accurate, up to date technical information on the many products, materials and equipment used on a project. In most cases individual products are not used in isolation, but form part of a building process. Also a particular manufacturer's and/or supplier's requirements for handling, storage, preparation, installation, finishing and protection of their product can vary from what might be considered the norm. Access to technical information can help overcome this potential problem.

 **Warranties**

### 1.4 WARRANTY - MANUFACTURER/SUPPLIER

 Provide a material manufacturer/supplier warranty:

 ~ years: For ~

 20 years: For Viking CT20

 30 years: For Viking Landmark 30

 40 years: For Viking Hatteras

 50 years: For Viking Highland Slate

 50 years: For Viking Independence

 These CertainTeed shingles are subject to the details contained in the International Warranty.

 - Provide this warranty on the Viking Roofspec Warranty standard form.

 - Commence the warranty from the date of completion of fixing.

 Modify or expand the clause to suit project or manufacturer/supplier requirements.

 There is no additional charge for this warranty.

### 1.5 WARRANTY - INSTALLER/APPLICATOR

 Provide an installer/applicator warranty:

 5 years: For ~ provided the shingles have been installed in strict accordance with Viking CertainTeed written installation instructions.

 - Provide this warranty using the Viking Approved Applicator standard form.

 - Commence the warranty from the date of completion of fixing.

 Insert CertainTeed shingle type; Viking CT20, Viking Landmark, Viking Hatteras, Viking Highland Slate, Viking Independence.

 There is no additional charge for this warranty.

### 1.6 WARRANTY - VIKING FULL SYSTEM WARRANTY

 Provide a Viking Full System Warranty for materials and installation:

 20 years: For **Viking CertainTeed Shingles**

 - Register with Viking Roofspec prior to installation

 - Requires installation by a Viking Approved Applicator.

 - Provide this warranty on the Viking Full System Warranty job completion form.

 - Commence the warranty from the date of completion of fixing.

 Refer to the section 1237 WARRANTIES for additional requirements.

 Modify or expand the clause to suit project requirements.

 A Viking Full systems Warranty is available for projects consisting of over 200 m² of Viking Shingles.

 A Viking Full systems Warranty has an additional cost based on the area of product used, additional charges may also apply depending on the location of the project.

 Viking Group Limited maximum liability for the cost of repair (limited to repair of the leak in the Viking system) is based on a calculation proportional to the length of the remaining warranty period, with their percentage share of repair costs decreasing over time. This warranty may be transferred to another owner at Viking group limited sole discretion, fees will apply to any reissuance.

 Refer to the "Terms and Conditions of Full System Warranty" for further details.

 **Requirements**

### 1.7 QUALIFICATIONS

 Installation of all components and accessories supplied by Viking Roofspec to be carried out by Viking Approved Applicators.

 Installation of components and substrates supplied by the building contractor must be completed by tradespersons with an understanding of roofing

 installation and in accordance with instructions given in Viking Roofspec Technical Literature and [BRANZ Appraisal 276](http://www.masterspec.co.nz/redirect.aspx?pl=173).

### 1.8 NO SUBSTITUTIONS

 Substitutions are not permitted to any specified Viking CertainTeed asphalt shingle roofing, or associated products, components or accessories.

### 1.9 INFORMATION FOR OPERATION AND MAINTENANCE

 Provide current Care and Maintenance information documents.

 **Performance**

 Note that in using the next clause you are setting a standard of performance for the contractor to meet. Specifiers should therefore consider adding some means of confirming (say by testing or certification) that the performance criteria will be or have been met. Refer to Viking Roofspec for performance requirements and where necessary call for a Viking Roofspec representative to inspect the works prior to the shingle roofing application.

### 1.10 ROOF LOADING

 To [NZBC B1](http://www.masterspec.co.nz/redirect.aspx?pl=222)/AS1 structure - Performance, to meet the requirements for loads arising from self weight, gravity loads, temperature, snow, wind, impact and creep.

 Modify this clause when required for roof weight (refer to [NZS 3604](http://www.masterspec.co.nz/redirect.aspx?pl=301) for roofing mass definitions) and wind zones (for suitability of shingles in all [NZS 3604](http://www.masterspec.co.nz/redirect.aspx?pl=301) wind zones up to and including extra high).

 For light roof mass not exceeding 20 kg/m² use CT20, Landmark Series, Hatteras or Highland Slate shingle profile. For heavy roof with a mass in excess of 20 kg/m², but not exceeding 60 kg/m² use Independence shingle profile. Suitable for use in areas where buildings are designed for a 1 kPa snow loading. Refer to Viking Roofspec for requirements for snow-prone areas.

### 1.11 SPECIFIC NAILING DETAILS

 Installation to comply with Viking written installation instructions set up in the Viking Roofspec CertainTeed Manual, current at the time of installation.

### 1.12 STRUCTURAL FIXINGS, EARTHQUAKE

 Use fixings and methods to comply with Viking Roofspec written installation instructions set up in the Viking Roofspec CertainTeed Manual and [BRANZ Appraisal 276](http://www.masterspec.co.nz/redirect.aspx?pl=173).

### 1.13 CO-ORDINATE

 Co-ordinate to ensure substrate and preparatory work is complete and other work programmed in the order required for access and completion of the roof. Refer to Viking Roofspec Manual for substrate requirements and specifications.

 The substrate is usually the responsibility of the main contractor unless agreed otherwise.

 Refer to plywood or SuperStrand manufacturer's technical literature for other options. Do not use hardboard or MDF board.

### 1.14 PERFORMANCE

 To [NZBC B2](http://www.masterspec.co.nz/redirect.aspx?pl=223)/AS1 - Durability, and to [NZBC E2](http://www.masterspec.co.nz/redirect.aspx?pl=347)/AS1 - External moisture. Accept responsibility for the weather-tight performance of the completed roofing system, including all penetrations through the roof and junctions with walls and parapets.

 Refer to later EXECUTION clause on co-operating with others on the installation of elements which penetrate or adjoin the roofing system; including walls and parapets, skylights, sundry elements fixed through the roofing surface, service pipework, etc.

## 2. PRODUCTS

 **Materials**

### 2.1 ASPHALT SHINGLES

 **Viking CertainTeed Shingles**, glass fibre reinforced asphalt roofing shingles, ceramic mineral chip surface with a UV resistant coating. Refer to SELECTIONS for shingle type.

 Available in a wide variety of styles and colours. Five profile types are available; CT20, Landmark Series (30, 40, 50), Hatteras, Highland Slate and Independence. For use on roofs with slopes greater than 9°. Low slope applications (9º - 18°) require additional underlayment.

 **Accessories**

### 2.2 UNDERLAY

 **Viking RhinoRoof** synthetic underlay, a coated woven polyolefin for use as a roofing underlayment.

### 2.3 PEEL AND STICK WATERPROOFING MEMBRANE

 **Viking Peel and Stick Waterproofing Membrane**, a self-adhering waterproofing membrane composed of a tough reinforcement that is impregnated and coated with SBS-modified asphalt.

 Prevents moisture from ice-dams and wind-driven rain in vulnerable areas. Ideal for low pitch underlayment or re-roofing projects.

### 2.4 SHINGLE STARTER STRIPS

 **Shingle Starter Strip,** pre cut shingle starters for use at eaves to ensure straight edges.

### 2.5 SHADOW RIDGE SHINGLES

 A three piece shingle available in 300mm x 900mm and 250mm x 1000mm sizes for use on hips and ridges.

### 2.6 ROOFING SEALANT

 **Viking Roofing Sealant**, a black mastic type sealant for use as a weather sealant and wind uplift adhesive.

### 2.7 BUTYL STRIP FLASHING

 **Butyl Strip Flashing,** 300mm wide butyl strip for use as apron and step flashings.

### 2.8 SHINGLE VENT

 **ShingleVent** ridge vent incorporating an external baffle and a weather filter, used to ventilate roof spaces beneath asphalt shingle roofs

 The air vent incorporates an external baffle to enhance air movement and a weather filter to protect against dust moisture and insect penetration.

 **Accessories - supplied by building contractor**

### 2.9 PLYWOOD SUBSTRATE

 Refer to 4337 PLYWOOD ROOFING AND DECKING for plywood substrate to [AS/NZS 2269.0](http://www.masterspec.co.nz/redirect.aspx?pl=1046).

 Modify the clause to suit project specified. Refer to the plywood manufacturer's literature for details and requirements. Amend the execution clauses that follow when the plywood substrate is specified elsewhere, such as in 4337 PLYWOOD ROOFING AND DECKING or 4337E ECOPLY® ROOFING AND DECKING section. Viking Roofspec recommend that the specifier contact Carter Holt Harvey Limited for detailed technical information for the use of plywood sheets for floors and substrate for roofing and decking.

### 2.10 PLYWOOD FIXINGS

 60mm x 2.8mm flat head hot-dipped galvanized or stainless steel angular-grooved nails for 15mm and 17mm plywood. Hot-dipped galvanizing to comply with [AS/NZS 4680](http://www.masterspec.co.nz/redirect.aspx?pl=1176). Stainless steel to be grade 316. Comply with plywood manufacturer's specifications.

 Screw fixing with 10 x 50mm stainless steel countersunk screws is an alternative option to nail fixing.

 Modify the clause to suit project specified. Viking Roofspec recommend that the specifier refer to Carter Holt Harvey Limited Ecoply Manual for detailed storage and handling requirements.

### 2.11 SUPERSTRAND SUBSTRATE

 Superstrand Sarking is an engineered wood panel, available as a square sheet, H3.1 non-solvent treated, 16.25mm thick with a textured surface on one face. Refer to [BRANZ Appraisal 703](http://www.masterspec.co.nz/redirect.aspx?pl=2050) - Strandboard Sarking and Juken New Zealand Ltd Superstrand substrate Technical Manual.

### 2.12 SUPERSTRAND FIXINGS

 Minimum of 75mm x 3.15mm flat head hot-dipped galvanized or stainless steel nails for SuperStrand Sarking. Hot-dipped galvanizing to comply with [AS/NZS 4680](http://www.masterspec.co.nz/redirect.aspx?pl=1176). Stainless steel to be grade 316. Comply with Superstrand manufacturer's technical specifications. Refer to SuperStrand Technical literature for fixing centres to suit site wind-zone.

### 2.13 METAL FLASHINGS AND TRIM

 Folded aluminium/zinc-coated to AS 1397 and [NZBC E2](http://www.masterspec.co.nz/redirect.aspx?pl=347)/AS1, 4.0 **Flashings**, or copper to minimum thickness 0.5mm.

### 2.14 SHINGLE NAILS

 Hot-dipped galvanized or stainless steel, 11 or 12 gauge roofing nails with a minimum head diameter of 9mm. Nail shanks must be long enough to penetrate the shingle and then go 20mm into the plywood sheathing or completely through the plywood, whichever is greater. Use stainless steel in all coastal zones.

## 3. EXECUTION

 **Conditions**

### 3.1 STORAGE AND HANDLING PLYWOOD SHEETS

 Transport and handle with care to avoid damaging the pre-finished surface. Store sheets in stacks clear of the ground, supported without sagging on evenly spaced horizontal bearers. Protect from damage and weather. Handle sheets carefully and reject those with damaged faces or edges. Comply with plywood manufacturer's specifications.

 Modify this clause to suit project specified. Long term storage of shingles and accessories must be under dry, ventilated cover. Viking Roofspec recommend that the specifier refer to Carter Holt Harvey Limited Ecoply Manual for detailed storage and handling requirements.

### 3.2 BEFORE COMMENCING WORK

 Check framing is suitable for laying substrate. Roof framing must comply with [NZS 3604](http://www.masterspec.co.nz/redirect.aspx?pl=301), or be to a specific design in accordance with [NZS 3603](http://www.masterspec.co.nz/redirect.aspx?pl=300) and [AS/NZS 1170](http://www.masterspec.co.nz/redirect.aspx?pl=268). Rafters or trusses must be at maximum 900mm centres for F11 roofing plywood or Superstrand substrate.

 Modify this clause to suit project specified. Roof design must take into account any requirements for areas subject to regular snowfalls as per the requirements of [NZBC E2](http://www.masterspec.co.nz/redirect.aspx?pl=347)/AS1, paragraph 1.3.

 **Application - plywood substrate**

### 3.3 FIXING PLYWOOD SHEETS - GENERAL

 Fix to Viking Roofspec online substrate guide and to the plywood manufacturer's requirements. Lay sheets with staggered joints in a brick bond pattern, face-grain of sheet at right-angles to support with sheets in square, true alignment and plane. Tongue and groove plywood, butt end joints to be fully supported with a 3mm gap between edges, with no gaps between the sheets tongue and grooved long-edges. Square edged plywood sheets to be fully supported at all edges and joints with a 3mm gap between the sheet edges. Fixings to comply with CertainTeed BRANZ appraisal No. 276 Table 3, 4 and 5. Fix using 60mm x 2.8mm galvanized nails.

 Screw fixing with 10 x 50mm stainless steel countersunk screws is an alternative option to nail fixing.

 Modify to suit project requirements. Refer to the plywood manufacturer's literature for details and requirements. Viking Roofspec recommend contacting Carter Holt Harvey Limited for detailed technical literature for the use of plywood sheets for floors and substrate for roofing and decking.

 **Application - Superstrand substrate**

### 3.4 FIXING SUPERSTRAND SHEETS - GENERAL

 Fix Superstrand to manufacturer’s requirements. Lay sheets with staggered joints in a brick bond pattern. Superstrand must be laid continuously over at least two spans (three framing members), single span (two framing members) and have a timber support (nog) at all sheet edges. Ensure there is a 3mm gap on all edges of the panel. Ensure ventilation as per the manufacturer's requirements. Fix using 75mm 3.15 hot dipped galvanised or stainless steel flat head nails.

 Very-High wind-zone fixing centres; 100mm panel ends / 150mm intermediate supports.

 Note: Fixings along panel edges must be at least 10mm from the panel edge.

### 3.5 FIT FLASHINGS

 Install flashings to [NZBC E2](http://www.masterspec.co.nz/redirect.aspx?pl=347)/AS1, 4.0 **Flashings**. Fit metal gutter flashing over the substrate and below the underlay to form drip edge at gutter. Fit metal barge flashing over underlay. Confirm roof penetrations are in place and flashed to the deck surface.

 **Application - CT20 shingles**

 CT20 shingles are a three-tab shingle product suitable for residential and commercial applications in medium wind zones. CT20 shingles have an increased wind resistance warranty of up to 159 kph (High Wind Zones) when installed to Viking Roofspec high wind speed specification. For details on this specification contact Viking Roofspec.

 For use on a lightweight roof design with slopes greater than 9°. Low slope applications (9º - 18°) require additional underlayment.

### 3.6 ROOF DECK REQUIREMENTS

 Apply shingles to minimum 15mm thick plywood or 16.3mm H3.1 Superstrand substrate.

 WARNING: The following two clauses are mutually exclusive, choose the underlay type depending on roof pitch and to suit the project specified. Contact Viking Roofspec for further advice and project specific recommendations.

### 3.7 LAY UNDERLAY - STANDARD OR STEEP SLOPE

 For roof slope over 18°; tightly lay Viking **RhinoRoof** synthetic underlay or **15W Saturated Felt Underlay**, horizontally lapped, 50mm across the roof and completely cover hips, ridges (except where ridge vents are used), and valleys. Only sufficient fasteners to temporarily hold the underlay in place need to be used.

 Delete this clause when roof slope is under 18° and use clause below.

### 3.8 LAY UNDERLAY - LOW SLOPE

 For roof slope between 9° and 18°; either lay one layer of **Peel and Stick Waterproofing Membrane**, or two layers of Viking **RhinoRoof** synthetic underlay or **15W Saturated Felt Underlay** lapped by half the width of the roll plus 25mm (resulting effectively in a double thickness of underlay). Only sufficient fasteners to temporarily hold the underlay in place need to be used.

 Modify this clause to suit project specified. Do not apply shingles below 9° slope. When roof slope is over 18° delete this clause and use clause above. For roofs with a pitch between 9º and 18º, cold climate areas and for high wind zone areas an additional underlay and/or a greater overlap may be required.

### 3.9 VALLEYS, CLOSED CUT

 Apply valley inner liner before shingles (either felt underlay or the Peel and Stick membrane). Viking Roofspec recommends the closed cut valley application using **Peel and Stick Waterproofing Membrane** to Viking CertainTeed Shingle installation requirements.

### 3.10 PLAN LAYOUT

 Plan layout to ensure the required overlap is maintained. Use chalk lines at every fourth or fifth row to maintain line. Adjust rows gradually correct non parallel situations. Set out rows to ensure cut pieces are not less than 150mm.

### 3.11 INSTALL CT20 SHINGLES

 Install **CT20 Shingles**, with the seven course, 140mm stepped-off diagonal method of application. Lay complete with matching accessories, flashed to roof features and penetrations, fitted with under-cloaks to CertainTeed Shingle installation requirements.

 The above application is the preferred option recommended by Viking. These shingles can also be applied using the eight course, 125mm stepped-off diagonal method of application. Contact Viking Roofspec for guidance and modify the clause to suit project specified.

### 3.12 SEALING

 Check shingles during the installation process and before the completion of the project for sealing. Any shingles which have not bonded (self-sealed) after 48 hours of fine weather require hand sealing using two 25mm spots of sealant under the corner of each tab.

 CAUTION: To prevent cracking, shingles must be sufficiently warm to allow proper forming for hips, ridges and valleys.

 In ideal conditions, hand sealing may not be required; however in situations where shingle self-sealing is delayed due to cool weather or airborne dust accumulation, all unsealed shingles must be fixed with sealant.

### 3.13 FASTENING

 Apply 4 nails per shingle, 11 or 12 gauge, and corrosion-resistant roofing nails with 9mm heads. Ensure the fasteners are driven straight and are flush with the shingle surface. Nails to be of sufficient length to penetrate 20mm into the deck, or through the thickness of the decking, whichever is the greater. Use stainless steel nails for high corrosion zones.

 Modify to suit project specified. Refer to Viking CertainTeed technical literature for the number and location of fasteners required.

### 3.14 INSTALL FLASHING

 Install flashings to [NZBC E2](http://www.masterspec.co.nz/redirect.aspx?pl=347)/AS1, 4.0 **Flashings**. Use corrosion resistant metal flashing.

### 3.15 INSTALL SHINGLEVENT

 Install ShingleVent over shingles to Viking CertainTeed Shingle installation requirements.

### 3.16 INSTALL RIDGE AND HIP CAP SHINGLES

 Use CT20 shingle cut to shape for hip ridge caps.

 **Application - Landmark shingles**

 Landmark shingles are built with a tough fibreglass mat base and strict dimensional tolerance for consistency. Landmark shingles are suitable for use in commercial and residential roof applications and are designed for very high wind zones. The Landmark shingles are available with built in (AR) algae resistance.

 For use on a lightweight roof design with slopes greater than 9°. Low slope applications (9º - 18°) require additional underlayment.

### 3.17 ROOF DECK REQUIREMENTS

 Apply **Landmark** shingles to minimum 15mm thick plywood wood decks or 16.3mm H3.1 Superstrand substrate.

 WARNING: The following two clauses are mutually exclusive, choose the underlay type depending on roof pitch and to suit the project specified. Contact Viking Roofspec for further advice and project specific recommendations.

### 3.18 LAY UNDERLAY - STANDARD OR STEEP SLOPE

 For roof slope over 18°; tightly lay Viking **RhinoRoof** synthetic underlay or **15W Saturated Felt Underlay**, horizontally lapped, 50mm across the roof and completely cover hips, ridges (except where ridge vents are used), and valleys. Only sufficient fasteners to temporarily hold the underlay in place need to be used.

 Delete this clause when roof slope is under 18° and use clause below.

### 3.19 LAY UNDERLAY - LOW SLOPE

 For roof slope between 9° and 18°; either lay one layer of **Peel and Stick Waterproofing Membrane**, or two layers of Viking **RhinoRoof** synthetic underlay or **15W Saturated Felt Underlay** lapped by half the width of the roll plus 25mm (resulting effectively in a double thickness of underlay). Only sufficient fasteners to temporarily hold the underlay in place need to be used.

 Modify this clause to suit project specified. Do not apply shingles below 9° slope. When roof slope is over 18° delete this clause and use clause above. For roofs with a pitch between 9º and 18º, cold climate areas and for high wind zone areas an additional underlay and/or a greater overlap may be required.

### 3.20 VALLEYS, CLOSED CUT

 Apply valley inner liner before shingles (either felt underlay or the Peel and Stick membrane). The closed cut valley application is recommended using **Peel and Stick Waterproofing Membrane** underlayment to CertainTeed shingle installation requirements.

### 3.21 PLAN LAYOUT

 Plan layout to ensure the required overlap is maintained. Use chalk lines at every fourth or fifth row to maintain line. Adjust rows gradually to correct non parallel situations. Set out rows to ensure cuts pieces are not less than 150mm.

### 3.22 INSTALL SHINGLES

 Install **Landmark** shingles, with the five course, 135mm stepped-off diagonal method of application. Lay complete with matching accessories, flashed to roof features and penetrations, fitted with under-cloaks to CertainTeed Shingle installation requirements.

 These shingles may be used for new construction or for re-roofing over old metric sized shingles.

### 3.23 SEALING

 Check shingles during the installation process and before the completion of the project for sealing. Any shingles which have not bonded (self-sealed) after 48 hours of fine weather require hand sealing.

 CAUTION: To prevent cracking, shingles must be sufficiently warm to allow proper forming for hips, ridges and valleys.

 In ideal conditions, hand sealing may not be required; however in situations where shingle self-sealing is delayed due to cool weather or airborne dust accumulation, all unsealed shingles must be fixed with sealant.

### 3.24 FASTENING - LOW AND STANDARD SLOPES

 Apply 4 -6 nails per shingle, 11 or 12 gauge, and corrosion-resistant roofing nails with 9mm heads. Ensure the fasteners are driven in straight and are flush with the shingle surface.

 There are three nail lines of Wide Track QB shingles. Position nails vertically between the upper and lower nailing guide. For low and standard slopes nailing between either the middle lines and lower lines or between the upper and middle lines. Nails to be of sufficient length to penetrate 20mm into the deck, or through the thickness of the decking, whichever is the greater. Use stainless steel nails for high corrosion zones.

 Modify to suit project specified. Refer to Viking CertainTeed Shingle technical literature for the number and location of fasteners required.

### 3.25 FASTENING - STEEP SLOPES

 Fasten each shingle with 6 nails and four 25mm diameter spots of **Viking Roofing Sealant** placed under each shingle according to Viking CertainTeed application instructions. Fasteners must penetrate the two-layer common bond area. Ensure the fasteners are driven in straight and are flush with the shingle surface.

 For slopes greater than 60°. Refer to CertainTeed shingle technical literature for the number and location of fasteners required.

### 3.26 INSTALL FLASHING

 Install flashings to [NZBC E2](http://www.masterspec.co.nz/redirect.aspx?pl=347)/AS1, 4.0 **Flashings**. Use corrosion resistant metal flashing.

### 3.27 INSTALL SHINGLEVENT

 Install **ShingleVent** over shingles to CertainTeed shingle installation requirements.

### 3.28 INSTALL RIDGE AND HIP CAP SHINGLES

 Install CertainTeed shadow ridge accessory roofing shingle of like colour for capping hips and ridges to Viking CertainTeed Shingle installation requirements.

 **Application - Hatteras™ shingles**

 For use in commercial and residential roof applications designed for very high wind areas, featuring an oversized shingle, extra heavy fibreglass reinforcing and a technologically advanced sealant. Viking Roofspec warrant Hatteras™ to withstand winds up to 175 kilometres per hour when installed in accordance with CertainTeed standard fixing specification.

 Hatteras, Highland Slate and Independence shingles are eligible for an increased wind resistance warranty of up to 57m/s (202 kph) (Extra High Wind Zones) when installed to Viking Roofspecs high wind speed specification. For details on this specification contact Viking Roofspec.

 The Hatteras™ shingles are algae-resistant and thus protect against staining or discolouration from algae. Suitable for new construction or in tear off applications.

 For use on a lightweight roof design with slopes greater than 9°. Low slope applications (9º - 18°) require additional underlayment.

### 3.29 ROOF DECK REQUIREMENTS

 Apply shingles to minimum 15mm thick plywood or 16.3mm H3.1Superstrand substrate.

 WARNING: The following two clauses are mutually exclusive, choose the underlay type depending on roof pitch and to suit the project specified. Contact Viking Roofspec for further advice and project specific recommendations.

### 3.30 LAY UNDERLAY - STANDARD OR STEEP SLOPE

 For roof slope over 18°; tightly lay Viking **RhinoRoof** synthetic underlay or **15W Saturated Felt Underlay**, horizontally lapped, 50mm across the roof and completely cover hips, ridges (except where ridge vents are used), and valleys. Only sufficient fasteners to temporarily to hold the underlay in place need to be used.

 Delete this clause when roof slope is under 18° and use clause below.

### 3.31 LAY UNDERLAY - LOW SLOPE

 For roof slope between 9° and 18°; lay either one layer of **Peel and Stick Waterproofing Membrane**, or two layers of Viking **RhinoRoof** synthetic underlay or **15W Saturated Felt Underlay** lapped by half the width of the roll plus 25mm (resulting effectively in a double thickness of underlay). Only sufficient fasteners to temporarily hold the underlay in place need to be used.

 Modify this clause to suit project specified. Do not apply shingles below 9° slope. When roof slope is over 18° delete this clause and use clause above. For roofs with a pitch between 9º and 18º, cold climate areas and for high wind zone areas an additional underlay and/or a greater overlap may be required.

### 3.32 VALLEYS, CLOSED CUT

 Apply valley inner liner before shingles (either felt underlay or the Peel and Stick membrane). The closed cut valley application is recommended using **Peel and Stick Waterproofing Membrane** to CertainTeed shingle installation requirements.

### 3.33 PLAN LAYOUT

 Plan layout to ensure the required overlap is maintained. Use chalk lines at every fourth or fifth row to maintain line. Adjust rows gradually to correct non parallel situations. Set out rows to ensure cuts pieces are not less than 150mm.

### 3.34 INSTALL SHINGLES

 Install **Hatteras™** shingles, with the single column, 112mm stepped-off vertical racking method of application. Lay complete with matching accessories, flashed to roof features and penetrations, fitted with under-cloaks to CertainTeed shingle installation requirements.

 An alternative option recommended by Viking is the six course, stepped-off, diagonal method of application. Contact Viking Roofspec for guidance and modify the clause to suit project specified.

### 3.35 SEALING

 Check shingles during the installation process and before the completion of the project for sealing. Any shingles which have not bonded (self-sealed) after 48 hours of fine weather require hand sealing using two 25mm spots of sealant under the corner of each tab.

 CAUTION: To prevent cracking, shingles must be sufficiently warm to allow proper forming for hips, ridges and valleys.

 In ideal conditions, hand sealing may not be required; however in situations where shingle self-sealing is delayed due to cool weather or airborne dust accumulation, all unsealed shingles must be fixed with sealant.

### 3.36 FASTENING

 Apply 5 nails per shingle, 11 or 12 gauge, and corrosion-resistant roofing nails with 9mm heads. Staples are not allowed for the **Hatteras™** series. Locate nails 235mm above the bottom edge of the shingle, 25mm in from each side of the shingle and above the cutouts. Nails to be of sufficient length to penetrate 20mm into the deck, or through the thickness of the decking, whichever is the greater.

 Modify to suit project specified. Refer to Viking CertainTeed shingle technical literature for the number and location of fasteners required.

### 3.37 INSTALL FLASHING

 Install flashings to [NZBC E2](http://www.masterspec.co.nz/redirect.aspx?pl=347)/AS1, 4.0 **Flashings**. Use corrosion-resistant metal flashing.

### 3.38 INSTALL SHINGLEVENT

 Install **ShingleVent** over shingles to Viking CertainTeed shingle installation requirements.

### 3.39 INSTALL RIDGE AND HIP CAP SHINGLES

 Install **Hatteras™** accessory roofing shingles of matching colour for capping hips and ridges to CertainTeed shingle installation requirements.

 Modify the clause if using the alternative option where the product itself is cut from full shingles for capping the hips and ridges.

 **Application -Highland Slate™ shingles**

 Highland Slate™ shingles are designed for use in very high wind zones, for wind speeds up to 175kph. The bevelled tabs are individually coloured to give the look, texture and tone of natural slate.

 Highland Slate™, Hatteras™ and Independence shingles are eligible for an increased wind resistance warranty of up to 57m/s (202 kph) (Extra High Wind Zones) when installed to Viking Roofspecs high wind speed specification. For details on this specification contact Viking Roofspec.

 The Highland Slate shingles are algae-resistant and thus protect against staining or discolouration from algae. Suitable for new construction or in tear off applications.

For use on a lightweight roof design with slopes greater than 9º. Low slope applications (9º - 18º) require additional underlayment.

### 3.40 ROOF DECK REQUIREMENTS

 Apply shingles to minimum 15mm thick plywood or 16.3mm H3.1Superstrand substrate.

 WARNING: The following two clauses are mutually exclusive, choose the underlay type depending on roof pitch and to suit the project specified. Contact Viking Roofspec for further advice and project specific recommendations.

### 3.41 LAY UNDERLAY - STANDARD OR STEEP SLOPE

 For roof slope over 18º tightly lay Viking **RhinoRoof** synthetic underlay or **15W Saturated Felt Underlay**, horizontally lapped, 50mm across the roof and completely cover hips, ridges (except where ridge vents are used), and valleys. Only sufficient fasteners to temporarily to hold the underlay in place need to be used.

 Delete this clause when roof slope is under 18º and use clause below.

### 3.42 LAY UNDERLAY - LOW SLOPE

 For roof slope between 9º and 18º lay either one layer of **Peel and Stick Waterproofing Membrane**, or two layers of Viking **RhinoRoof** synthetic underlay or **15W Saturated Felt Underlay** lapped by half the width of the roll plus 25mm (resulting effectively in a double thickness of underlay). Only sufficient fasteners to temporarily hold the underlay in place need to be used.

 Modify this clause to suit project specified. Do not apply shingles below 9º slope. When roof slope is over 18º delete this clause and use clause above. For roofs with a pitch between 9º and 18º cold climate areas and for high wind zone areas an additional underlay and/or a greater overlap may be required.

### 3.43 VALLEYS, CLOSED CUT

 Apply valley inner liner before shingles (either felt underlay or the Peel and Stick membrane). The closed cut valley application is recommended using **Peel and Stick Waterproofing Membrane** to CertainTeed shingle installation.

### 3.44 PLAN LAYOUT

 Plan layout to ensure the required overlap is maintained. Use chalk lines at every fourth or fifth row to maintain line. Adjust rows gradually to correct non parallel situations. Set out rows to ensure cuts pieces are not less than 150mm.

### 3.45 INSTALL SHINGLES

 Install **Highland Slate**™ shingles, with the single column, 112mm stepped-off vertical racking method of application. Lay complete with matching accessories, flashed to roof features and penetrations, fitted with under-cloaks to CertainTeed shingle installation requirements.

 An alternative option recommended by Viking is the six course, stepped-off, diagonal method of application. Contact Viking Roofspec for guidance and modify the clause to suit project specified.

### 3.46 SEALING

 Check shingles during the installation process and before the completion of the project for sealing. Any shingles which have not bonded (self-sealed) after 48 hours of fine weather require hand sealing using two 25mm spots of sealant under the corner of each tab.

 CAUTION: To prevent cracking, shingles must be sufficiently warm to allow proper forming for hips, ridges and valleys.

 In ideal conditions, hand sealing may not be required; however in situations where shingle self-sealing is delayed due to cool weather or airborne dust accumulation, all unsealed shingles must be fixed with sealant.

### 3.47 FASTENING

 Apply 5 nails per shingle, 11 or 12 gauge, and corrosion-resistant roofing nails with 9mm heads. Staples are not allowed for the Highland Slate™ series. Locate nails 235mm above the bottom edge of the shingle, 25mm in from each side of the shingle and above the cutouts. Nails to be of sufficient length to penetrate 20mm into the deck, or through the thickness of the decking, whichever is the greater.

 Modify to suit project specified. Refer to Viking CertainTeed shingle technical literature for the number and location of fasteners required.

### 3.48 INSTALL FLASHINGS

 Install flashings to NZBC E2/AS1, 4.0 **Flashings**. Use corrosion-resistant metal flashing.

### 3.49 INSTALL SHINGLEVENT

 Install **ShingleVent** over shingles to Viking CertainTeed shingle installation requirements.

### 3.50 INSTALL RIDGE AND HIP CAP SHINGLES

 Install **Highland Slate**™ accessory roofing shingles of matching colour for capping hips and ridges to CertainTeed shingle installation requirements.

 Modify the clause if using the alternative option where the product itself is cut from full shingles for capping the hips and ridges.

 **Application - Independence shingles**

 Independence shingles are designed for use in very high wind zones, for wind speeds up to 175kph. The random laminated tabs and smooth surface blend capture the rich depth of cedar shakes.

 Hatteras, Highland Slate and Independence shingles are eligible for an increased wind resistance warranty of up to 57m/s (205 kph) (Extra High Wind Zones) when installed to Viking Roofspec high wind speed specification. For details on this specification contact Viking Roofspec.

 For use on a heavyweight roof design with slopes greater than 9°. Low slope applications (9º - 18°) require additional underlayment.

### 3.51 ROOF DECK REQUIREMENTS

 Apply shingles to minimum 15mm thick plywood decks or 16.3mm H3.1 Superstrand substrate.

 WARNING: The following two clauses are mutually exclusive, choose the underlay type depending on roof pitch and to suit the project specified. Contact Viking Roofspec for further advice and project specific recommendations.

### 3.52 LAY UNDERLAY - STANDARD OR STEEP SLOPE

 For roof slope over 18°; tightly lay Viking **RhinoRoof** synthetic underlay or **15W Saturated Felt Underlay**, horizontally lapped, 50mm across the roof and completely cover hips, ridges (except where ridge vents are used), and valleys. Only sufficient fasteners to temporarily hold the underlay in place need to be used.

 Delete this clause when roof slope is under 18° and use clause below.

### 3.53 LAY UNDERLAY - LOW SLOPE

 For roof slope between 9° and 18°; either lay one layer of **Peel and Stick Waterproofing Membrane**, or two layers of Viking **RhinoRoof** synthetic underlay or **15W Saturated Felt Underlay** lapped by half the width of the roll plus 25mm (resulting effectively in a double thickness of underlay). Only sufficient fasteners to temporarily hold the underlay in place need to be used.

 Modify this clause to suit project specified. Do not apply shingles below 9° slope. When roof slope is over 18° delete this clause and use clause above. For roofs with a pitch between 9º and 18º, cold climate areas and for high wind zone areas an additional underlay and/or a greater overlap may be required.

### 3.54 VALLEYS, CLOSED CUT

 Apply valley inner liner before shingles (either felt underlay or the Peel and Stick membrane). The closed cut valley application is recommended using **Peel and Stick Waterproofing Membrane** to Viking CertainTeed shingle installation requirements.

### 3.55 PLAN LAYOUT

 Plan layout to ensure the required overlap is maintained. Use chalk lines at every fourth or fifth row to maintain line. Adjust rows gradually to correct non parallel situations. Set out rows to ensure cuts pieces are not less than 150mm.

### 3.56 INSTALL SHINGLES

 Install **Independence** shingles, with the four course, 150mm stepped-off diagonal method of application. Lay complete with matching accessories, flashed to roof features and install shingles complete with matching accessories, flashed to roof features and penetrations, fitted with under-cloaks to Viking CertainTeed shingle installation requirements.

 These shingles can also be applied using the 125mm stepped off, diagonal method. These shingles can be used for new construction or for roofing over old shingles.

### 3.57 SEALING

 Check shingles during the installation process and before the completion of the project for sealing. Any shingles which have not bonded (self-sealed) after 48 hours of fine weather require hand sealing using two 25mm spots of sealant under the corner of each tab.

 CAUTION: To prevent cracking, shingles must be sufficiently warm to allow proper forming for hips, ridges and valleys.

 In ideal conditions, hand sealing may not be required; however in situations where shingle self-sealing is delayed due to cool weather or airborne dust accumulation, all unsealed shingles must be fixed with sealant.

### 3.58 FASTENING

 Apply 4 nails per shingle, 11 or 12 gauge, and corrosion-resistant roofing nails with 9mm heads. Locate nails 15mm above the top of each cut-out and 25mm and 300mm in from each side of the shingle. Nails to be of sufficient length to penetrate 20mm into the deck, or through the thickness of the decking, whichever is the greater. Use stainless steel nails in high corrosion zones.

 When roof slope exceeds 60°, or where individual shingles meet a wall or ridge at any slope, apply an additional fastener, horizontally centred on each laminated tab and place within 30mm of the upper edge of the shingle, to prevent slippage of laminated tabs.

 Modify to suit project specified. Refer to Viking CertainTeed shingle technical literature for the number and location of fasteners required.

### 3.59 INSTALL FLASHING

 Install flashings to [NZBC E2](http://www.masterspec.co.nz/redirect.aspx?pl=347)/AS1, 4.0 **Flashings**. Use corrosion-resistant metal flashing.

### 3.60 INSTALL SHINGLEVENT

 Install **ShingleVent** over shingles to CertainTeed shingle installation requirements.

### 3.61 INSTALL RIDGE AND HIP CAP SHINGLES

 Install CertainTeed Shadow Ridge accessory roofing shingles of like colour for capping hips and ridges to CertainTeed shingle installation requirements.

 **Completion**

### 3.62 COMPLETE

 Ensure the work is complete with all flashings, undercloaks, valleys, ridges and hips properly installed so the finished roof is completely weathertight.

### 3.63 CLEAR

 Clear trade rubbish and unused materials from the roof and surrounds regularly during the work and at completion. Sweep down the completed roof and flush out spouting, gutters and rainwater pipes.

### 3.64 REPLACE

 Replace damaged or marked elements. Remove unused materials from the site.

## 4. SELECTIONS

 Substitutions are not permitted to the following, unless stated otherwise.

 Select the shingle type to suit the project specified and delete other options.

### 4.1 CT20 VIKING CERTAINTEED ASPHALT SHINGLES

 Brand: **Viking CertainTeed**

 Type: **CT20**

 Plywood substrate: ~

 Colour: ~

 Underlay: ~

 Starters: Viking CertainTeed starter metric

 Metal flashings: ~

 Options:

 Colour: Cedar brown, driftwood, burnt sienna, timber blend, weathered wood, moire black, heather blend.

 Viking RhinoRoof synthetic underlay

 Underlay: 15w Saturated Felt Underlay

 Peel and Stick Waterproofing Membrane

 NOTE: Choose the underlay type depending on roof pitch and to suit the project specified, refer Viking Roofspec for project specific advice.

### 4.2 LANDMARK VIKING CERTAINTEED ASPHALT SHINGLES

 Brand: **Viking CertainTeed**

 Type: **Landmark**

 Plywood substrate: ~

 Colour: ~

 Underlay: ~

 Starters: Viking CertainTeed starter metric

 Metal flashings: ~

 Options:

 Colour: Black walnut, birchwood, burnt sienna, driftwood, granite grey, heather blend, moire black, resawn shake, weathered wood, mountain timber, atlantic blue.

 Viking RhinoRoof synthetic underlay

 Underlay: 15w Saturated Felt Underlay

 Peel and Stick Waterproofing Membrane

 NOTE: Choose the underlay type depending on roof pitch and to suit the project specified, refer Viking Roofspec for project specific advice.

### 4.3 HATTERAS™ VIKING CERTAINTEED ASPHALT SHINGLES

|  |  |  |
| --- | --- | --- |
| Brand: | **Viking CertainTeed** |  |
| Type: | **Hatteras™** |  |
| Plywood substrate | : | ~ |
| Colour: | ~ |  |
| Underlay: | ~ |  |
| Starters: | Viking high performance starter |  |
| Metal flashings: | ~ |  |

 Colour: Moire black, weathered wood, cottage red, colonial slate, huntergreen, tudor brown.

 Viking RhinoRoof synthetic underlay

 Underlay: 15w Saturated Felt Underlay

 Peel and Stick Waterproofing Membrane

 NOTE: Choose the underlay type depending on roof pitch and to suit the project specified, refer Viking Roofspec for project specific advice.

### 4.4 INDEPENDENCE VIKING CERTAINTEED ASPHALT SHINGLES

 Brand: **Viking CertainTeed**

 Type: **Independence**

 Plywood substrate: ~

 Colour:

 Underlay:

 Starter strip: Viking CertainTeed starter metric

 Metal flashings: ~

 Colour: burnt sienna, charcoal black, driftwood, heather blend, hunter green, weathered wood, colonial slate, cottage red, georgetown grey.

 Viking RhinoRoof synthetic underlay

 Underlay: 15w Saturated Felt Underlay

 Peel and Stick Waterproofing Membrane

 NOTE: Choose the underlay type depending on roof pitch and to suit the project specified, refer Viking Roofspec for project specific advice.

### 4.5 HIGHLAND SLATE™ VIKING CERTAINTEED ASPHALT SHINGLES

|  |  |  |
| --- | --- | --- |
| Brand: | **Viking Certain Teed** |  |
| Type: | **Highland Slate**™ |  |
| Plywood substrate: |  ~ |  |
| Colour: | ~ |  |
| Underlay: | ~ |  |
| Starters: | Viking high performance starter |  |
| Metal flashings: | ~ |  |

 Colour: Black granite, smokey Quartz, Fieldstone (upon request), weathered wood (upon request), new england stone (upon request), saddle brown (upon request), tudor brown (upon request)

 Underlay: Viking RhinoRoof synthetic underlay

 15w Saturated Felt Underlay

 Peel and Stick Waterproofing Membrane

 NOTE: Choose the underlay type depending on roof pitch and to suit the project specified, refer Viking Roofspec for project specific advice.