

### Issue 10 April 2014

# Deck Installation, Care and Maintenance



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### Safety First

When handling and processing treated timber always wear gloves and eye protection and work in a well ventilated area.

Wash hands thoroughly after handling treated timber and especially before eating or smoking.

Do not burn timber off-cuts. Dispose of them safely as refuse. Treated timber contains chemical preservatives.

When constructing pergolas keep the surrounding area clear of people until the structure is fully secure.

Wear goggles when pressure washing or scrubbing with chemical cleaners or restorers.

Keep children away from the work area until the job has been completed and tools have been stored safely.

A Treated Timber User Guide for TANALISED® E /TANALISED® EXTRA treated timber covering its general use is available from Lonza Wood Protection - www.lonzawood.com.

The grinding and cutting of **Q-Grip®** products may produce dust and loose flying particles and we strongly recommend that personnel carrying out these tasks wear suitable Personal Protective Equipment including gloves, eye protection, particulate dust mask and ear defenders.

### Fixings



**Q-Deck**<sup>®</sup> Plus Timber-Tite heavy duty landscaping screws.



steel decking screws.



2 Alter

**Q-Clad®** Tongue Tite Plus stainless steel cladding screws.

All **Q-Deck**<sup>®</sup> products should be fixed or secured using recognised quality products. We recommend the use of screws to fix deck boards and bolts or structural screws to secure newel posts or structural elements of the deck. The raw material and the type of coating used to protect these from corrosion is vital.

#### This is why Hoppings recommend stainless steel fixings for the best results.

If galvanised fixings are used they should be of the hot dipped variety to help avoid corrosion We do not recommend the use of pneumatic nail guns to secure decking boards.

4.5 x 50mm **Q-Deck**<sup>®</sup>-Tite Plus Stainless Steel Decking Screws are available for use with any **Q-Deck**<sup>®</sup> decking but especially Lyptus and our new **Q-Deck**<sup>®</sup> smooth Garapa decking.

**Q-Deck**<sup>®</sup> Lunawood concealed fixing clips and stainless steel screws. 100 per box (includes driver bit).

On 500mm joist centres 17 clips are required to fit one square metre of 26 x 117mm **Q-Deck**<sup>®</sup> Lunawood hidden fix decking boards.



Always follow the manufacturer's instructions when working with deck fixings.





✓ ✓ ✓ ✓ ✓

### Top Tips & Guidance

It is advisable to loosely lay components, ie. in particular deck boards, out on the finished sub frame prior to securing them. The longer they are left to become surface dry the less the effects of shrinkage will be apparent after fixing them. The timber can also be cut and sanded more easily when dry.

Fix boards with corrosion resistant screws, or for the very best results use stainless steel screws (2 screws 15-20% of its width in from each edge of the board). Structural fixtures and fittings should be specially coated or of hot dipped galvanised material - see page 2.



It is advisable to pre-drill pilot holes near the end of boards to avoid splitting.



length should be 21/2 times the thickness of the deck board.

Deck board screw

For maximising its life it is advisable to cover fabric weed membrane with pea shingle.

### Guidance to further minimise the risk of fungal decay and insect attack and thus simplify a warranty claim

All cut ends and notches made to the timber components must be protected with a suitable brush-on end grain preservative (eg. Ensele®/ Ronseal® end grain preserver/Hickson Decor® end grain preservative) to maintain the integrity of the preservative treatment.

Where possible Use Class 4 components should not be cut, notched or bored if they are then to be used

in ground contact. If Use Class 4



deck support posts are cut then the cut end should not be placed in the ground. If Use Class 4 deck joists for ground level or partially elevated decks are cut then they should be laid on a free draining area of compacted hardcore (or similar) not straight onto earth or areas of lawn. Subframes that are laid in direct contact with earth are at increased risk of fungal decay and subsistence. See page 11-12 of the Planning & Design pdf guide for further details.

It is advisable to loosely lay components, ie. in particular deck boards, out on the finished sub frame prior to securing them. The longer they are left to become surface dry the less the effects of shrinkage will be apparent after fixing them. The timber can also be cut and sanded more easily when dry. Note: If the boards are allowed to fully dry out prior to fitting, the gap between boards should be increased to 9mm to allow subsequent

expansion in the wetter seasons.

Cut the top of the support post at an angle to aid water 'run off'.

If you need to attach a ledger board to the wall of a dwelling it is advisable to leave a gap between them - use 10mm thick spacer/ packer. This will maintain ventilation and enable the wall and ledger to dry.

Bevel the top of the concrete footing around the support posts to aid water 'run off'.

When using Q-Deck<sup>®</sup> Lyptus, Garapa or Twinson decking it is advisable to use Q-Deck<sup>®</sup> Use Class 4 subframe components. For Q-Deck<sup>®</sup> Lunawood the use of these specific components are a condition of the Q-Deck<sup>®</sup> Lunawood warranty.







### Technical Advice

#### INCOMPATIBILITY ISSUES

Take care not to allow uncoated iron products or parts of originally coated iron products to come in contact with **Q-Deck®/ Q-Grip® /Q-Deck®** hardwood components. Ferrous substances may react with the preservative treatment within the timber and cause unsightly black staining of the surfaces, that may prove difficult to remove. So in particular, it is worth considering if the filing or grinding of metal products needs to be performed near to or over the deck. If possible avoid doing this near decks but if this is not practical then the deck surfaces should be carefully protected/covered to enable capture and disposal of the iron particles.

In very hot weather pine resin can rise to the surface of **Q-Deck**<sup>®</sup> products and dark stains/coatings can exacerbate this. In the unlikely event this occurs, wait for the resin to form a crust and scrape away; repeat if necessary.

### **Building Your Deck**

#### PREPARING THE OVERSITE

The oversite must be free draining or of a gradient of 1 in 40 to allow water "run off". If the area you have chosen is grass you can either remove the turf or cover it with a weed barrier, as long as its edges are tucked deep into the soil using an edging spade. If your deck is to be at ground level then the removal of 100mm of soil is recommended. Replace the topsoil with 100mm of compacted gravel or hardcore. This provides a very solid but free draining oversite on to which you can build the sub-frame. On any over site it is essential that you lay a weed barrier. It is advisable to cover the top of the weed barrier with a light stopping layer of pea shingle. You could use strategically positioned patio slabs instead of compacted gravel or hardcore, but we do not recommended this as they tend to settle/subside causing problems with your deck later.

#### SIZE ISSUES

Wood swells when it is pressure pre-treated with a waterbased preservative - as much as 4% of the finished size after machining - and shrinks as it dries which may vary from piece to piece. This can be evident when butting deck boards end to end. We therefore advise letting the deck boards, in particular, dry somewhat before fitting. This not only helps to achieve a more constant size but improves their workability. Although minimised by the water repellent additive used with **Q-Deck®** products, climatic changes cause the wood to continually shrink and swell in service and in turn this movement may vary from piece to piece.

#### SUBFRAME

#### Aims

- Structurally sound for its intended end use.
- Only Use Class 4 treated wood should be used in ground contact.
- Provide lateral rigidity.
- That the deck will not settle/subside and has a gradient fall in one direction without any low points (sag).

### **Building Your Deck**

#### PATIO STYLE DECK raft construction garden area that drains well.

Remove turf and 100mm minimum of topsoil where deck is to be positioned.

Position a minimum of 2 deck support posts in footings to act as frame anchors.

Replace topsoil with compacted down gravel or hardcore

Lav weed barrier.

Lay Use Class 4 subframe allowing for 50mm drainage gap all round and attach to post anchors. Backfill around frame with gravel or pea shingle.



Now fit newels or just deck boards if balustrading is not required.

#### Low level Deck post and beam construction limited final deck height

Deck support posts are either supported in 'standoff' proprietary bracket (on footing) or supported in a footing. Joists are attached to beams using mini joist hangers.

Now fit newels or just deck boards if balustrading is not required.



#### ELEVATED DECK post and beam construction

for sloping sites, multi-tier decks or simply where final deck height is not an issue.

Lateral bracing of the beams may be necessary.

Now fit newels or just deck boards if balustrading is not required.



#### DECK OVER EXISTING PATIO

on existing structurally sound concrete slab ie. 100mm slab on top of 100mm compact hardcore.

In this instance 72mm thick beams are supported off the slab using strong angle brackets and durable packing pieces. (45mm thick Use Class 4 joists could also be used for this purpose).

Now fit newels or just deck boards if balustrading is not required.



### Support Posts and Beams

PLEASE NOTE: For a free draining deck surface, you must incorporate a gradient in one direction of your deck.



Most decks (other than ground level) utilise a post and beam construction. The support posts (normally placed at no more than 1800mm) centres sit in or on a concrete footing, the later utilising a metal connector / shoe.



Q-Deck<sup>®</sup> PLUS Multi-purpose deck posts material is ideal for use as support posts and is also available shaped (3m long classic post), should you want to incorporate a shaped newel above deck level.



Beams are the main horizontal support members of the deck and when connected as pairs (as recommended) can provide both great strength and an ideal place for housing Q-Deck® PLUS newel posts, should you require balustrades. A pair of timbers are either bolted (recommended) or

screwed (with, for example, Q-Deck Plus timbertite heavy duty landscaping screws) to the support posts at a height to suit whilst also very easily incorporating a desired gradient for water run off (1:80).

#### BEAM SPAN GUIDANCE

We recommend beams are constructed from two 44 x 145mm Q-Deck<sup>®</sup> joists and are placed at maximum centres of 1.8m. In this instance a maximum span between deck posts of 2.0m is recommended.

Diagram opposite shows figures for domestic applications (uniformly distributed load  $1.5 \text{kN/m}^2$ ).

#### FIXING THE JOISTS

PLEASE NOTE: For free draining deckboards it is highly recommended that you lay them down a

gradient fall. This is especially important if the deckboards are grooved.

Depending on the type of deck you are building the joists can be fixed in a number of different ways.

For a ground level deck or partially elevated you can simply construct a raft which sits onto your free draining oversite.

When beams are used in deck construction there are two methods of fixing joists. Firstly if height is an issue you can fix joists to beams using metal connectors commonly known as mini joist hangers.

Alternatively the easiest and most structurally sound way (if height is not an issue) is to simply sit the joist on top of the beams.

It is advisable to nail each joist to each beam at an angle. The tail ends of the joists are

secured using a rim joist that is double nailed to the ends of the joists.

With all these joist configurations it is essential that noggins are also fitted between the joists. These add rigidity to the sub-frame.

If balustrading is required, newel posts must be fitted at this point, before any decking is laid.





### Fitting Newels

If balustrading is planned, fit your newel posts before laying decking.

Note: At this point the type of balustrade system chosen will govern the required newel height above the deck (see fitting balustrades, pages 12-14).

Double beam construction using Q-Deck<sup>®</sup> Plus Multi-purpose posts provides the ideal newel post housing.

Secure using suitable bolts or landscape screws in 2 or 3 directions for best results.



# Fitting Q-Deck<sup>®</sup> Treated Deckboards

#### SIZE ISSUES

Wood swells when it is pressure pre-treated with a waterbased preservative - as much as 4% of the finished size after machining - and shrinks as it dries. We therefore advise letting the deck boards, in particular, dry somewhat before fitting. This not only helps to achieve a more constant size but improves their workability. Although minimised by the water repellent additive used with Q-Deck<sup>®</sup> products, climatic changes cause the wood to continually shrink and swell in service and in turn this movement may vary from piece to piece, causing small surface splits and shakes to occur. Refer to top tips, on page 4.

Laying in patterns or at a 45° angle efficiently utilises any length purchased.

It is a good idea to overlap the subframe and cut to desired length in a straight line or curve, if required.





If deck boards need to be joined, butt them end to end but take care to stagger the joints so they do not overlap from row to row.

### Adding Slip Resistance to Q-Deck® Decking

New Q-Grip<sup>®</sup> Strip<sup>™</sup> can be retro-fitted to existing decks where the deckboards have become slippery or to certain specific Q-Deck<sup>®</sup> deckboards, ie. York and Canterbury Q-Deck<sup>®</sup> deckboards and Q-Deck<sup>®</sup> Lunawood Hidden Fix deckboards.

Note: To be able to effectively secure Q-Grip<sup>®</sup> Strip<sup>™</sup> it must be dry and of a temperature above 5°C. Ideally store at room temperature until just before fitting.

To fit the strips to the Q-Deck<sup>®</sup> deckboards detailed above:

Firstly ensure the grooves are clean, dry free of debris and that any original deck screws used to secure the deckboards in the first place are not sitting proud of the base of the groove. If so, tighten accordingly.

Then consider the area to be covered with Q-Grip<sup>®</sup> Strips<sup>™</sup> and cut them to length as required using a grinder with stone cutting disc. It is best to place the Q-Grip<sup>®</sup> Strip<sup>™</sup> flat side down on some scrap wood to do this (see image opposite).







Cutting Q-Grip<sup>®</sup> Strips™.

### Adding Slip Resistance to Q-Deck® Decking

#### Apply one continuous (centrally located in the groove to be filled) 4-6mm maximum bead of a suitable gap



filling adhesive that also has the properties of an external use sealant i.e. flexible and both water and U.V. resistant. You may consider the use of a sealant/adhesive called 'theWORKS' by Geocel<sup>®</sup> in grey or Sikaflex EBT or 11FC+ by Sika Ltd in grey. Always follow the adhesive manufacturers instructions. For up to date information please download our Q-Grip<sup>®</sup> literature via www. qualitydecking.co.uk or call our Q-Deck<sup>®</sup> hotline on 0800 849 639.

2 Check for

any surface contaminants on the reverse of each Q-Grip<sup>®</sup> Strip™ then carefully place the Q-Grip<sup>®</sup> Strip™ in



the desired position and gently apply downward pressure to 'pinch' it into place along its length using a rubber headed mallet. This action will force the adhesive to fill the voids between the edges of the groove and the back of the specially profiled Q-Grip<sup>®</sup> Strip<sup>™</sup>.

3 If you need to butt Q-Grip<sup>®</sup> Strip<sup>™</sup> end to end then apply slightly more adhesive at this position and carefully wipe away



excess adhesive that forces up between the joint sealing the gap in the process.

Note: If an end of a Q-Grip<sup>®</sup> Strip<sup>™</sup> doesn't 'pinch' sufficiently to allow it to be secured flush with the top of the groove, it is advisable to gently and

temporarily secure it with a 4mm gauge 12-25mm long screw. You will need to pre-drill a pilot hole though the Q-Grip® Strip™



using a small diameter masonry drill bit (we advise no greater than 3mm). Once the adhesive has

cured and created a suitable bond remove the screw and carefully fill and seal the hole it accommodated with more adhesive/sealant - see top image opposite.

To fit the strips to an existing deck the same process applies as detailed in points 1-3 on previous page (if applicable), after you have created your own 5 x 8mm grooves using a hand held router.

Note: On hardwood decks this grooving process will not affect any existing warranties that may be in place but we advise that you confirm this with the original supplier. When grooving existing softwood decks it is likely that any existing warranties that may be in place will be invalidated and we advise that you confirm this with the original supplier. This is the case for any Q-Deck® decking not designed to accept Q-Grip<sup>®</sup> Strip<sup>™</sup>.



Q-Deck<sup>®</sup> Canterbury - accepts 2 Q-Grip<sup>®</sup> Strips™.



Q-Deck<sup>®</sup> York - accepts up to 5 Q-Grip<sup>®</sup> Strips<sup>™</sup>.



Q-Deck<sup>®</sup> Lunawood -Hidden Fix profile - accepts 2 Q-Grip<sup>®</sup> Strips™.



### Fitting Q-Deck<sup>®</sup> Lunawood Hidden Fix Decking

The general principles as detailed in the Q-Deck<sup>®</sup> deck planning and design guide also apply to Q-Deck<sup>®</sup> Lunawood decking. The hidden fix profile decking allows you to use the quick and easy to use Q-Deck<sup>®</sup> Lunawood concealed clips and provides a fixing free look. Alternatively you can use two 4.5 x 50mm Q-Deck<sup>®</sup>-Tite Plus stainless steel deck screws at each joist junction in the grooves provided but pre-drilling pilot holes is recommended to avoid splitting the boards.

• Fit 26 x 117mm Q-Deck<sup>®</sup> Lunawood over joists set at 500mm centres, maximum.

For commercial applications, in principle reduce to 300mm centres but please consult Q-Deck<sup>®</sup> directly on 0800 849 6339 for further advice on a project by project basis.

- Leave 6mm gaps between adjacent boards when fitting either Q-Deck<sup>®</sup> Lunawood with deck screws.
- When using the concealed clips the lead edge of the first board should be fixed using one stainless deck screw at every joist junction through the groove provided (Figures 1 & 2).
- On the opposite side of the first board fix the first line of Q-Deck<sup>®</sup> Lunawood concealed decking clips at every joist junction taking care not to over-tighten them (Figure 3).
- Cut the next board to the required length and then carefully butt it up against the first line of concealed clips. Align the board in its length and then fit a second line of clips at every joist junction. You will find that minimal pressure is required to locate each board as the clips pinch them into place as the screw is tightened into the clip. Again take care not to over-tighten each screw.

Continue the process for all subsequent boards until you reach the last one that it fitted as the first detailed above.

• If required you can now strategically fit Q-Grip Strips to the boards specially profiled grooves.







Please note:

It is not a requirement of the **Q-Deck® Lunawood** 20 year Warranty but highly recommended, is the use of a non-film forming penetrative protective coating. **But, please note**:



New thermowood products cannot be effectively coated without first opening the pores of the wood, by either applying special chemicals, or naturally, by leaving it to weather outdoors in situation for at least 12 months. The use of Prepdeck followed by Net Trol by Owatrol on new thermowood products or the use of just Net Trol on suitably weathered thermowood products enables the effective application of either Aquadecks or Protext by Owatrol. These non-film forming penetrative systems help protect against the greying effects of U.V. light whilst preserving the appearance of the wood. These systems when used correctly should create a matt finish. The darker the colour the more the natural appearance of the wood is obscured.



Q-Grip<sup>®</sup> Strips fitted to Q-Deck<sup>®</sup> Lunawood deckboards.



Aquadecks Teak finish on Q-Deck<sup>®</sup> Lunawood.

# Fitting Q-Deck<sup>®</sup> Lyptus/Garapa Hardwood Deckboards

- Fit Q-Deck<sup>®</sup> Lyptus over 400mm joists centres, maximum.
- Fit Q-Deck<sup>®</sup> Garapa over joists set at 600mm centres, maximum.
- Leave 8mm gaps between adjacent boards when fitting either Q-Deck<sup>®</sup> Lyptus or Q-Deck<sup>®</sup> Garapa.
  Being a kiln dried hardwoods means you have to allow for some expansion of the boards during wetter times of the year
- It is important to pre-drill pilot holes and countersink before fitting screws to reduce the chance of splitting these timbers, especially near the ends of boards
- Use a minimum of two 50mm stainless steel screws per board at every joist junction. Use 4.5 x 50mm Q-Deck®-Tite Plus Stainless Steel Decking Screws.

Note: Like all hardwood decking Q-Deck Lyptus and Q-Deck Garapa weather to grey after exposure to U.V light. Both are also highly susceptible to staining in contact with iron due to the high levels of tannin present, so it is advisable to only use stainless steel fixings. The black staining that can occur is easily removed using Net Trol by Owatrol. Over time the tannin can be washed out of Q-Deck® Lyptus and Q-Deck® Garapa. Please note that the fabric of a building or associated landscaping products could become stained by mobile tannin.



This washing effect is more likely to occur during prolonged heavy rain and be most concentrated in the period just after fitting your Q-Deck<sup>®</sup> Hardwood

deck. To minimise tannin bleed, new hardwood decking can be coated with Owatrol's Stoptan product.

Q-Deck<sup>®</sup> Garapa deckboards are not as straight as other deckboards in the



Q-Deck<sup>®</sup> Garapa finished with Deks Olje D1 decking oil.

Q-Deck<sup>®</sup> range; however any distortion is normally easily corrected when fitting them by applying pressure to bring them back into line.

### Creating a Border

Creating a border around the edge of the deck and incorporating fascia boards provides an attractive finish.

The smooth face of **Q-Deck**<sup>®</sup> Cambridge decking or Multi-purpose material is particularly good for use as fascias.

Consider using **Q-Grip®** slip resistant decking or **Q-Grip® Strips™** in conjunction with **Q-Deck®** York/Canterbury/Lunawood Hidden Fix boards to give a border/lead edge with enhanced grip characteristics.



eck joist Multi-purpose as fast



Winchester deck board





### Fitting Balustrades

#### **READY MADE SECTIONS**

**Q-Deck® Plus** makes balustrading easy by offering ready-made 1800mm long sections of balustrade, complete with handrail.

All you have to do is fit the sections between correctly pre-spaced newel or pergola posts and screw them into position using **Q-Deck**-Tite handrail bracket kits. Sections can also be cut to fit narrower gaps between newel posts.

#### PLEASE NOTE

No opening is permitted greater than 100mm. Therefore, spindles need to be spaced at approximate 120mm centres. Allow 8 spindles every metre of handrail. For decks more than 600mm above ground level it is necessary to achieve a balustrade height of at least 1100mm.



Q-Deck-Tite handrail bracket

... OR USING LOOSE COMPONENTS

**1** Fit bottom universal rail between newel posts.

 Use more universal rail as handrail and fit at approx.
900mm high using Q-Deck-Tite handrail bracket kit.

**3** Cut a piece of spacing infill and fit to the underside of the handrail. Using a guide spacer at lower end, slide spindle **4** into the vertical position against the infill. Fix at the top and bottom with screws. Repeat for each spindle.







NB There is a 10mm height difference between the ready-made balustrade and the loose component built version..

#### FITTING BALUSTRADES USING THE MULTIPURPOSE PRODUCTS

These can provide an easier, more solid construction option. Hand rail heights of 1100mm are easily achieved for high level decks.

Please note that you will have to cut components to the desired length when using any products from the **Q-Deck® Plus** Multi-purpose range.

- 1 Fit Multi-purpose, 85 x 85mm newel at required positions and height. Note: 1a corner newels are offset.
- **2** Cut and fit Multi-purpose 27 x 95mm top and bottom baluster rails to the newels.
- 3 Mitre finish at corners.
- 4 Cut Multi-purpose, 33 x 33mm balusters to desired length (4a chamfer for a neat finish). Alternatively use our new 27mm x 69mm x 970mm flat chamfered spindle. Measure, space and fit to the top and bottom rail ideally using 2 screws at the top.
- 5 Cut and fit Multi-purpose 33 x 120mm handrail to top of newels and top rail, with mitre finish at corners.

### Fitting Balustrades

### FITTING BALUSTRADES USING GRECIAN COLUMNS

Grecian/New Contemporary columns can be used with Multi-purpose boards and rails to create more robust looking balustrades.

- 1 If required fit 85 x 85mm Multi-purpose post material to the subframe as newel posts. The tops of the newel posts should be 555mm above the deck.
- 2 Measure distance between newels and cut Multi-purpose 27 x 95mm baluster rails to suit. Chamfer the corners of the baluster rails to give a neat finish with the face of the newels.
- **3** Space to suit and fit columns as shown to top and bottom baluster rails.
- 4 Fit column assembly to deck between newels.
- 5 Measure, cut and fit Multi-purpose, 33 x 120mm handrail to top of newels.
- 6 Secure assembly to handrail from underneath as shown in the diagram.

Take care with length of screw (max 50mm).

#### **DISGUISING VOIDS**

Voids under elevated decks can be enclosed using Q-Garden® multi-purpose screening.

#### FITTING BALUSTRADES USING DECKORATORS™ BAROQUE BALUSTERS

Deckorators™ baroque balusters are fitted in a similar way to classic and colonial balusters

The construction differs in only 2 ways. Firstly the balusters are fitted to the outer face of the top and bottom Q-Deck<sup>®</sup> Multi-purpose 44 x 95mm baluster rail. Secondly the balustrade is always capped with a wide flat handrail.

1 Measure distance between newels, cut and fit 44 x 95mm baluster rails to the newels approximately 640mm apart allowing for the top of the baluster to be positioned flush with the top rail and short of the lower edge of the bottom rail by approximately 10mm. (Bottom rail should be no more than 100mm above the deck surface). Use new Q-Deck-Tite handrail bracket kit for a neat fit.

2 Calculate spacing of the balusters and then fit to the outer face of the top and bottom baluster rails using the screws provided. (Using a spacer will help achieve a consistent looking gap).





At 20mm centres 8 balusters are required per metre run of balustrading.



### Fitting Balustrades

- **3** Measure, cut and fit handrail to the top of the newels, with a mitre finish at corners. or...
- 4 If using Colonial, Classic or Contemporary Q-Deck<sup>®</sup> newels (may be existing). Measure, cut, chamfer and fit Multi-purpose 27 x 95mm handrail to the top baluster rail. The chamfer cuts will create a neat finish to the newel. Note: the balustrade is always capped with a wide flat handrail.



### Steps and Stairs

You can create stairs using the **Q-Deck® Plus** Multi-purpose range of products. However, it is advisable to seek the skills of an experienced tradesman.

**Q-Grip®** products suit use on steps and stairs. In particular new **Q-Grip® Strip™** used in conjunction with **Q-Deck® York/Canterbury/ Lunawood** Hidden Fix boards provide a quick and adaptable solution when applied to the outer grooves of the board and step edge.



Step frame set on compacted hardcore and weed barrier.



Steps can be created by extending different levels of sub frame.

Mark out position of treads and risers. Both treads and risers should have a maximum length of 600mm, unless additional mid-term support is incorporated.

- 1 Screw short sections of 33 x 33mm Multipurpose baluster to the string.
- 2 Risers screwed to string (27/33 x266mm string material).
- **3** The treads are screwed to the string.
- 4 It is a good idea to coat treads with a brush applied antislip coating such as Hickson Decor Antislip or utilise Q-Grip<sup>®</sup> products to make the treads.



### Care and Maintenance

### What to Expect

Small surface splits can occur in all components during the warmer months. This happens as the timber dries and shrinks and is most prominent on larger section timbers such as **Q-Deck® Plus** 117 x 117mm grand newels. In the winter months the splits will tend to close as the timber swells. During the first year the colour of the deck will fade slightly and this will continue due to the 'greying' affects of U.V. light. For best results apply Seasonite by Owatrol immediately before or after fitting **Q-Deck®** preservative pretreated decking.

Poorly designed, constructed, situated and maintained decks will increase the risk of colonisation by surface moulds (rather like internal plaster mould). Surface moulds do not affect the structural performance of a deck but if left to develop can cause a speckled black staining within the surface of the timber. If caught early this can be removed with a bathroom/kitchen scourer and proprietary deck cleaner.

### Clean

Even preservative pre-treated wood will not look its best after a long winter and a wet spring, so a little time spent cleaning will pay dividends for the summer months.

We would recommend that you sweep your deck regularly and hose it down when dirt accumulates. Allowing dirt and other organic matter such as leaf litter or soil to accumulate on your deck, increases the risk of both mould (as described above) and fungal infection. The organic matter may not only carry the source of fungal infection but may hinder drainage and provide the damp conditions that they need to survive. There are many effective cleaning agents available. Many are useful to remove algae growth which can occur and without cleaning this type of contamination can create a slip hazard. Cleaning your deck with a suitable deck

cleaning agent and pressure washing at the beginning and end of the season is a recommended course of action.

A highly effective cleaning agent is Net-trol by Owatrol, a wood cleaner and colour restorer.

For the removal of previously applied oil finishes that have failed use Aquanett by Owatrol, then neutralise with Net-trol. For the rejuvenation of very dirty, stained hardwood decks use Prepdeck stripper/ cleaner by Owatrol instead of Aquanett.

Have you considered the new **Q-Grip®** range of slip resistant decking products for the potentially slip sensitive areas of your deck?

### Re-seal and Protection

The finished deck should be kept clean and for good looks, resealed with a brush-on water repellent every year -Seasonite Wood Protection finish for exterior woods by Owatrol<sup>®</sup> is a good option. For best results re-apply a water repellent when the deck is dry after cleaning.

If you want to add colour to Q-Deck® preservative pre-treated products then pigmented Textrol by Owatrol is a protective coating to use after 12 months use. Water based stains are not recommended as the in-built water repellent within Q-Deck® preservative pre-treated products can affect the adhesion of the stain to the timber. This affect diminishes over time due to wear and tear. Please bear in mind that once you apply a stain/protective coating to decking it will need regular re-staining and heavy foot traffic areas will have to be re-stained more frequently than other areas. If applying to **O-Grip®** slip resistant deckboards, care must be taken not to apply stain to the aggregate strip areas as it may not adhere or dry properly on these areas and affect its slip resistance properties. Always follow the manufacturer's instructions when working with deck maintenance products.









### Care and Maintenance

#### Take Care

It is advisable to regularly check for any proud shards or splinters of timber and remove them should they occur for safety reasons.

### Composite Decking

After completing your deck, **Twinson®** decking should be thoroughly washed to remove dust associated with the manufacturing process.

Although Twinson® decking is significantly easier to clean than solid timber decking, some surface pollutants may still prove troublesome to remove i.e. particularly very sticky substances (that harden) such as silicone sealants, resins and the sap of trees. The removal of these sticky substances should be swift otherwise very minor staining may result. For further details on the resistance of our composite decking products see our downloadable composite decking guide at www. gualitydecking.co.uk. It is always best to remove dirty marks as soon as possible using water, mild cleaner and a sponge. In most cases your Twinson<sup>®</sup> deck can be cleaned with a pressure washer combined with, if necessary, a mild cleaning product. For food marks (such as ketchup, wine, soup, fruit juice, cola, coffee) scrub well with diluted bleach solution then rinse well with water

Note of caution: Leaf litter, in particular, if allowed to accumulate to the extent that the leaves start to decompose, can greatly increase the chance of slipping. This can be more prominent on the harder surface of composite type decking.

### Q-Deck<sup>®</sup> Hardwood

Like all natural hardwood decking the colouration of **Q-Deck®** hardwood decking fades over time due to the lightening effect of ultraviolet light (U.V.).

For best results use your new **Q-Deck**<sup>®</sup> hardwood deck for 6-8 weeks before:

1. Thoroughly cleaning it with Net-Trol Wood Cleaner and Colour restorer by Owatrol.

2. Oiling with Deks Olje D1 Saturating Wood oil by Owatrol.

It is advisable to repeat this process above every 12 months substituting Deks Olje D1 with Textrol Penetrating Oil by Owatrol. If however, some colour protection is required, then the use of a pigment coating should be applied to hardwood decking to slow down the bleaching effect of UV light. Pigmented Textrol is a good non-film forming option that preserves the natural appearance of the wood. For higher levels of U.V. protection, use Aquadecks by Owatrol, a water based, non-film forming, saturating, matt finish. All the pigmented coating systems mentioned above preserve the natural appearance of the wood (however, the darker the colour the more the natural appearance of the wood is obscured) and are available in a range of colours.

If colour protection is required immediately after fitting **Q-Deck**<sup>®</sup> hardwood then it is possible to prepare the surface of the decking by first applying Aquanett (or diluted Prep-deck), then neutralising with Net-Trol before finishing with one of the three Owatrol pigmented coating systems mentioned above.









### Care and Maintenance

Regular cleaning of **Q-Deck®** hardwood with Net-Trol every 6-12 months is advisable.

If finished with a protective coating then re-application of the coating should take place as and when required but for continually good results it is advisable to re-apply every 12 months.

Over time some of the tannin is washed out of these timbers. Please note that the fabric of a building or associated landscaping products could become stained by the mobile tannin. This washing effect is more likely to occur during prolonged heavy rain, and be most concentrated in the period just after fitting your **Q-Deck**<sup>®</sup> hardwood deck.

To minimise tannin bleed new hardwood decking can be coated with Owatrol's Stoptan product.

The tannin content also makes **Q-Deck**<sup>®</sup> hardwood susceptible to staining in contact with iron products or particles and moisture (as cedar and oak is also). If iron/ferrous staining occurs it can be easily remedied with the application of proprietary wood bleaching products such as Liberon<sup>®</sup> wood bleacher or Net-trol<sup>®</sup> wood cleaner and colour restorer by Owatrol<sup>®</sup>.

Dark staining can also occur if impervious static items, such as plastic furniture aren't regularly moved. Otherwise, particularly in the wetter months, rain water can become trapped causing the extractives in the hardwood to migrate to the surface, causing deeply engrained staining that cannot be removed.

### Q-Deck<sup>®</sup> Lunawood

O-Deck<sup>®</sup> Lunawood's natural dark brown colouration weathers to grey over a relatively short space of time, when exposed to U.V. light. In the interim it is normal for the surface of the thermowood to become colonised by mould spores that appear as small dark spots. These will also fade overtime. It is not a requirement of the O-Deck® Lunawood 20 year Warranty but highly recommended, is the use of a non-film forming penetrative protective coating. But, please note: New thermowood products cannot be effectively coated without first opening the pores of the wood, by either applying special chemicals, or naturally, by leaving it to weather outdoors in situation for at least 12 months. The use of Prepdeck followed by Net Trol by Owatrol on new thermowood products or the use of just Net Trol on suitably weathered thermowood products enables the effective application of either Aquadecks or Protext by Owatrol. These non-film forming penetrative systems help protect against the greying effects of U.V. light whilst preserving the appearance of the wood. These systems when used correctly should create a matt finish. The darker the colour the more the natural appearance of the wood is obscured.

Regular cleaning of **Q-Deck® Lunawood** with Net-trol® every 6-12 months is advisable. If finished with a protective coating then reapplication of the coating should take place as and when required but for continually good results it is advisable to re-apply every 12 months.



Q-Deck<sup>®</sup> Garapa being cleaned with Net-Trol.



Q-Deck<sup>®</sup> Lyptus - 6 months after staining with Textrol 'rustic oak' decking oil.



**Q-Deck®** Lyptus showing early signs of weathering.



Q-Deck<sup>®</sup> Lunawood being cleaned with Net-Trol.



### Domestic Case Study

The following series of photographs shows a typical construction of an elevated deck over a sloping site.



Checking the deck location....



....consider existing features....



....working out a design...



....creating a detailed plan...



....building the support beams....





....ledger board fixed to existing steps....



....joist fixed over the beams....



....fixing the newel posts....



....completed subframe....



....fixing the handrails and base rails....



....fixing the first deckboards....



....fixing the balustrades...



....fixing the deckboards throughout the deck....



....the completed deck ....