

3151C COMFLOR COMPOSITE FLOOR SYSTEM

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 composite steel/concrete floor systems:

- ComFlor 210 (CF210)
- ComFlor 80 (CF80)
- ComFlor 60 (CF60)
- ComFlor SR (CFSR)

Modify or extend the above description to suit the project being specified.

Detailed information including, load span tables and ComFlor design software, is available from Steel & Tube, telephone 0-9-271 1788, web site www.comflor.nz, email comflor@comflor.co.nz.

1.1 RELATED WORK

Refer to ~ for ~.

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

Refer to the appropriate concrete section(s) used in the specification.

1.2 DOCUMENTS

Documents referred to in this section are:

AS 1397	Continuous hot-dip metallic coated steel sheet and strip - Coatings of zinc and zinc alloyed with aluminium and magnesium
AS/NZS 1554.2	Structural steel welding - Stud welding (steel studs to steel)
AS/NZS 2327	Composite Structures - Composite steel-concrete construction in buildings
NZS 3101.1	Concrete structures standard
NZS 3104	Specification for concrete production
NZS 3114	Concrete surface finishes
NZS 3121	Water and aggregate for concrete
NZS 3122	Portland and blended cements (General and special purpose)
NZS 3404.1	Steel Structures Standard
AS/NZS 4671	Steel reinforcing materials
AS/NZS ISO 9001	Quality management systems - Requirements
HERA R4-107	Composite Floor Construction Handbook - 2005
CMP 1004	Suspended slabs flatness tolerances (Steel Advisor, SCNZ)
CMP 1005	Suspended slabs level tolerances (Steel Advisor, SCNZ)

Documents listed above and cited in the clauses that follow are part of this specification. However, this specification takes precedence in the event of it being at variance with the cited document.

This section uses NZS 3404: 1997 as it is referenced in NZBC B1/AS1. NZS 3404: 2009 is not used as it is not referenced at time of writing. Using NZS 3404: 2009 would be an Alternative Solution.

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

RELATED DOCUMENTS:

Refer to the following related documents when preparing this section:

NZBC B1/AS1	<i>Structure</i>
AS/NZS 1170	<i>Structural design actions</i>
NZS 3109	<i>Concrete construction</i>
BRANZ BU 535	<i>Repairing cracks in concrete</i>
BRANZ BU 623	<i>Curing concrete</i>

1.3 MANUFACTURER'S DOCUMENTS

Manufacturer's and supplier's documents relating to work in this section are:

- Steel and Tube ComFlor Brochure ComFlor 210
- Steel and Tube ComFlor Brochure ComFlor 80
- Steel and Tube ComFlor Brochure ComFlor 60
- Steel and Tube ComFlor Brochure ComFlor SR

ComFlor Quick reference load span tables - ComFlor 60, ComFlor 80, ComFlor SR
ComFlor - The Complete Guide - DVD
Copies are available from Steel & Tube ComFlor
Telephone: +64 9-271 1788
Website: www.comflor.nz

For specific technical information call Steve Stickland, Product Manager, or Brett Pocock, Construction Sales Engineer, Steel and Tube ComFlor.

Email: comflor@comflor.co.nz

Telephone: Steve: +64 9-271 1788; Brett +64 9-271 1792.

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.

Requirements

1.4 NO SUBSTITUTIONS

Substitutions are not permitted to any specified ComFlor composite steel/concrete floor systems, or associated components and products.

1.5 QUALIFICATIONS

Carry out work with experienced, competent installers familiar with the installation of composite floor decking systems.

ComFlor approved installers:

- Composite Floor Decks Ltd, Auckland, telephone +64 9 273 1111
- Composite Floor Decks South Island Ltd, telephone +64 3 373 8103
- email: info@studwelders.co.nz
- website: www.studwelders.co.nz

1.6 STEEL REINFORCING COMPLIANCE

Steel reinforcing materials for concrete to [AS/NZS 4671](#). Steel to be manufactured in New Zealand, or by an overseas manufacturer holding a current valid (or equivalent) NZ S Mark or ACRS certificate for that type of steel. Confirm compliance and provide evidence if requested.

Modify if non-compliant steel is specified.

Note, non-compliant steel could be assessed and approved on one (or more) of the following:

- *Steel has other product certification system, contractor to demonstrate direct equivalency to NZ S Mark or ACRS.*
- *Contractor to nominate the members in which each individual batch of steel is to be used and shall also state the country, mill of origin and the specification to which the steel for that member is produced, and clearly demonstrate how it is equivalent to AS/NZS 4671.*
- *Certificates from a IANZ/Telarc/NATA laboratory of chemical composition and physical properties of all reinforcing steel. All testing will be in compliance with Clause B7 of AS/NZS 4671, including frequency of sampling and testing.*

2. PRODUCTS

Materials

2.1 COMFLOR DECKING

Roll formed G500 high tensile galvanized steel sheet with Z275 zinc coating to AS 1397.

2.2 TIMBER FORMWORK

No. 2 framing and dressing or merchantable grade radiata pine boards to obtain the concrete finish specified for adjoining concrete work.

2.3 REINFORCING STEEL

Grade 500 deformed bars to [AS/NZS 4671](#).

Check with design engineer and modify this clause when other grades of steel are being used.

- 2.4 STEEL MESH
Hard drawn steel wire spot welded to AS/NZS 4671, deformed and to mesh dimensions shown on the drawings.
Modify this clause if dimensions are not shown on drawings.
- 2.5 TYING WIRE
Mild steel drawn wire not less than 1.2mm diameter.
- 2.6 CONCRETE
The concrete producer is responsible for mix design and properties to NZS 3104.
Cement: To NZS 3122
Aggregate: To NZS 3121
Rate of sampling: For compressive strength testing - refer to SELECTIONS.
Refer to design engineer for concrete requirements, including use of admixtures.
- 2.7 TEMPORARY BEARERS AND PROPS
No. 2 framing radiata pine. Refer to SELECTIONS/drawings for type.
The prop lines are placed at mid-span, or at third span, as required. It is important that the prop lines are evenly spaced. They should offer continuous bearing of at least 75mm to the underside of the deck.
Modify this clause when Acrow-type steel props are used, or delete propping if not required.

Components

- 2.8 EDGE TRIM
ComFlor edge trim folded from G250, to thickness chosen (refer to the edge trim selector table in the ComFlor brochure), Z275 galvanized steel, in 2.4 metre lengths. Dimensions as scheduled/as shown on drawings.
For retaining wet concrete at the decked floor perimeters. Refer to the edge trim selector table in the ComFlor brochure. Edge trim is available in 0.9mm, 1.2mm, 1.6mm and 2.0mm thicknesses.
- 2.9 DECKING FASTENERS
Shot fired pins or self drilling/tapping fasteners as scheduled/shown on the drawings.
For attaching decking to support structure.

Components - ComFlor 210

- 2.10 COMFLOR 210 END SUPPORT DIAPHRAGMS
ComFlor 210 end support diaphragms folded from G250, 1.5mm thickness, Z275 galvanized steel, in 2.4 metre lengths.
Steel end support diaphragms, as manufactured by Steel & Tube, are essential to the ComFlor 210 System to ensure the structural integrity of the deck during the construction phase.
Raked end support diaphragms are also available.
- 2.11 COMFLOR 210 SHEAR-BOND CLIPS
1.2mm gauge galvanized steel as scheduled/as shown on the drawings.
The shear bond connector clip is partly responsible for the composite action of the decking and must not be omitted.
- 2.12 COMFLOR 210 SIDE LAP FASTENERS
Self-drilling fasteners with a minimum diameter of 5.5mm at 350mm centres.
Used to stitch side laps along the bottom trough of the decking profile in pre-punched holes. Every side lap fastener should also fix and locate a shear bond clip in position.
Recommended fasteners 14g - 10tpi x 22mm.

Components - ComFlor 80

- 2.13 COMFLOR 80 PROFILED END CLOSURE STRIPS
ComFlor 80 profiled end closure strips folded from G250, 0.90mm thickness, Z275 galvanized steel in 2.4 metre lengths.
Prevents the flow of concrete back under the decking profile. Also assists the accurate set out and installation of the ComFlor.
- 2.14 COMFLOR 80 SHEAR STUDS
Welded shear studs as scheduled/shown on the drawings.

Modify this clause if steel studs are not detailed. Specify these connectors with the steel beam construction to establish composite action between slab and beam.

- 2.15 **COMFLOR 80 HANGER FIXINGS**
Galvanized steel wedge nut fixings as suspension points supplied by Steel & Tube.
Used to support suspended ceilings, ductwork, wiring and piping. Specify here with cross reference, or specify them in the work section making use of them. The carrying capacity needs checking against the load being suspended. Suited to gravity load only. Supplied as M10 thread only. Product Code M10WN.
- 2.16 **COMFLOR 80 SIDE LAP FASTENERS**
Use 12g - 14tpi x 20mm self drilling screws, one screw every third prepunched hole, to ComFlor requirements.
Used to stitch side laps of the decking profile through the pre-punched holes.
- 2.17 **COMFLOR 80 CONSTRUCTION JOINT FORMER**
Galvanized profile shaped to block the trough portion of ComFlor 80 below the layer of mesh. Timber boxing is used to form the slab height.
Used to form a void or construction joint where the ComFlor 80 sheeting is left intact during the concrete pour and avoids excessive concrete over flow and subsequent scabbling.

Components - ComFlor 60

- 2.18 **COMFLOR 60 PROFILED END CLOSURE STRIPS**
ComFlor 60 profiled end closure strips folded from G250, 0.90mm thickness, Z275 galvanized steel in 2.4 metre lengths.
Avoids the flow of concrete back under the decking profile. Also assists the accurate set out installation of the ComFlor.
- 2.19 **COMFLOR 60 SHEAR STUDS**
Welded shear studs as scheduled/as shown on the drawings.
Modify this clause if steel studs are not detailed. Specify these connectors with the steel beam construction to establish composite action between slab and beam.
- 2.20 **COMFLOR 60 HANGER FIXINGS**
Galvanized steel wedge nut fixings as suspension points supplied by Steel & Tube.
Used to support suspended ceilings, ductwork, wiring and piping. Specify here with cross reference, or specify them in the work section making use of them. The carrying capacity needs checking against the load being suspended. Suited to gravity loads only. Supplied as M10 thread only. Product Code M10WN60.
- 2.21 **COMFLOR 60 SIDE LAP FASTENERS**
Use 12g - 14tpi x 20mm self drilling screws, one screw every third prepunched hole, to ComFlor requirements.
Used to stitch side laps of the decking profile through the pre-punched holes.
- 2.22 **COMFLOR 60 CONSTRUCTION JOINT FORMER**
Galvanized profile shaped to block the trough portion of ComFlor 60 below the layer of mesh. Timber boxing is used to form the slab height.
Used to form a void or construction joint where the ComFlor 60 sheeting is left intact during the concrete pour and avoids excessive concrete over flow and subsequent scabbling.

Components - ComFlor SR

- 2.23 **COMFLOR SR END CLOSURE**
ComFlor SR has three options to plug the dovetail to minimise concrete egress.
- Closed Ends – ends can be crushed during manufacture
- Open Ends – block with polyethylene foam plug in each dovetail
- Open ends – block with angle closure strips folded from G250, 0.55mm thickness, Z275 galvanized steel.
Avoids the flow of concrete back under the decking profile.
- 2.24 **COMFLOR SR SHEAR STUDS**
Welded shear studs as scheduled/shown on the drawings.

Modify this clause if steel studs are not detailed. Specify these connectors with the steel beam construction to establish composite action between slab and beam.

- 2.25 COMFLOR SR HANGER FIXINGS
Galvanized steel wedge nut fixings as suspension points supplied by Steel and Tube.
Used to support suspended ceilings, ductwork, wiring and piping. Specify here with cross reference, or specify them in the work section making use of them. The carrying capacity needs checking against the load being suspended. Suited to gravity load only. Supplied as M10 thread only.
- 2.26 COMFLOR SR SIDE LAP FASTENERS
Use 12g - 14tpi x 20mm self drilling screws, one every third prepunched hole, to ComFlor requirements.
Used to stitch side laps of the decking profile through the pre-punched holes.

3. EXECUTION

Conditions

- 3.1 DEFECTS
Discard material showing visual defects or damage affecting its structural integrity and/or appearance.
- 3.2 DELIVERY, STORAGE AND HANDLING
Keep all components dry in transit. Store on a level firm base, clear of the ground on timber bearers, protected from weather, contamination and damage and away from current work areas. Prevent water and condensation from being trapped between adjacent surfaces.

Do not drag sheets across each other or other materials. Protect edges and surfaces from damage and ensure that section shape is not damaged during handling, storage or installation.
- 3.3 CONFORM
Conform to [NZS 3101.1](#), [NZS 3404.1](#), [AS/NZS ISO 9001](#) and [AS/NZS 2327](#) in the design, materials and manufacture of the steel decking.

Application

- 3.4 MODIFICATIONS
Cutting, drilling or modification of steel decking unless shown on the drawings, may only be carried out after receiving written approval.
- 3.5 CUTTING
Cut steel decking with a grinder, nibbler or plasma only.
Field cutting should be kept to a minimum. Decking sheets shown as continuous on the decking layout drawing should never be cut into more than one length. Sheets should never be severed at the location of a temporary support and the deck should never be fastened to a temporary support. Off-cuts and scrap should be disposed of as work progresses.
- 3.6 PROPPING
Locate bearers and props as shown on the drawings. Propping to be level, vertical and rigidly braced to support the entire width of the steel decking and the construction work. Minimum bearing width 75mm. Do not remove the propping structure until the concrete has reached at least 75% of its required design strength, or all construction loading has been removed.
Modify and extend this clause to clarify propping pattern if propping is not shown on the drawings.
- 3.7 FIX COMFLOR EDGE TRIM
Fit and fix galvanized steel edge trim, fixed to the support structure, with the top of the trim connected to the decking with restraint straps at 600mm centres using pop-rivets or self-drilling fasteners. Prop unsupported edges.
Refer to the edge trim selector table in the ComFlor brochure. Edge trim is available in 0.9mm, 1.2mm, 1.5mm and 2.0mm thicknesses. Select according to the edge trim depth required. Check with the design engineer, as additional reinforcement may be required for unsupported edges.

Application - ComFlor 210

- 3.8 **FIX COMFLOR 210 END SUPPORT DIAPHRAGMS**
Fit and fix end support diaphragms to the supporting structure, using a minimum of 3 fixings per 2.4 metre length.
- 3.9 **ERECT AND PLACE COMFLOR 210**
Erect and place to ComFlor requirements. Manually place the ComFlor decking onto the CF210 end support diaphragm as shown on the drawings with 50mm minimum end bearing of the sheets on steel (75mm on other materials). The pre-punched hole along the side lap should remain visible from above if the lap is correctly oriented. Lay sheets square and true to line and level. As each sheet is placed, fix crest section of the deck to the top of the end support diaphragm using one self - drilling screw per sheet end. Once the sheets for a whole bay are in place, secure the deck to the beams using one heavy-duty shot fired fixing or self drilling/tapping screw per trough.
Modify this clause if full details are not shown on the drawings.
- 3.10 **FIX SHEAR BOND CLIPS COMFLOR 210**
Fit and fix shear bond clips along the bottom of the trough of each sheet at 350mm centres using minimum 5.5mm diameter self-drilling fasteners through every pre-punched hole.
- 3.11 **FORM OPENINGS AND PENETRATIONS IN THE SLAB**
Form openings and penetrations as detailed and to ComFlor requirements, ensuring no trough reinforcing is severed, unless specifically designed for.
Provision of vertical service openings within the floor slab will necessitate careful design and planning. Smaller openings can be formed in the 425mm wide crest section of the ComFlor 210 deck, using timber shuttering or dense polystyrene blocks; with the metal only cut after curing of the concrete slab. Refer to the ComFlor 210 brochure for requirements for both small and large openings. Openings over 300mm will need to be trimmed with additional reinforcing. Large openings will generally require trimming by secondary beams.

Application - ComFlor 80

- 3.12 **ERECT AND PLACE COMFLOR 80**
Erect and place the ComFlor 80 decking as shown on the drawings with continuous seating at support lines. Lay sheets square and true to line and level and screw together using 12g - 14tpi x 20mm self drilling screws, one every third prepunched hole, to ComFlor requirements. Decking sheets shown as continuous on the decking layout plan should never be cut into more than one sheet. Fasten to permanent support structure as detailed on the drawings.
Modify this clause if details are not shown on the drawings.
- 3.13 **FIX COMFLOR 80 EDGE FORMS AND END CAPS**
Fit to ComFlor requirements.
- 3.14 **SITE WELDED SHEAR STUDS**
On site flash weld steel stud shear connectors where detailed on the drawings. Provide a Producer Statement confirming compliance with the procedural control procedures of [AS/NZS 1554.2](#).
Delete this clause when steel studs are shop welded or not used.
- 3.15 **FORM OPENINGS AND PENETRATIONS IN THE SLAB**
Form openings and penetrations as detailed and to ComFlor requirements, ensuring no trough reinforcing is severed, unless specifically designed for.
- 3.16 **CONSTRUCTION JOINTS**
Position the ComFlor 80 Construction Joint Former as shown on the drawings, fixed in place through every pre-punched hole.

Application - ComFlor 60

- 3.17 ERECT AND PLACE COMFLOR 60
Erect and place the ComFlor 60 decking as shown on the drawings with continuous seating at support lines. Lay sheets square and true to line and level and screw together using 12g - 14tpi x 20mm self drilling screws, one every third prepunched hole, to ComFlor requirements. Decking sheets shown as continuous on the decking layout should never be cut into more than one sheet.
Fasten to permanent support structure as detailed on the drawings.
Modify this clause if details are not shown on the drawings.
- 3.18 FIX COMFLOR 60 EDGE FORMS AND END CAPS
Fit to ComFlor requirements.
- 3.19 SITE WELDED SHEAR STUDS
Site flash weld steel stud shear connectors where detailed on the drawings. Provide a Producer Statement confirming compliance with the procedural control procedures of [AS/NZS 1554.2](#).
Delete this clause when steel studs are shop welded or not used.
- 3.20 FORM OPENINGS AND PENETRATIONS IN THE SLAB
Form openings and penetrations as detailed and to ComFlor requirements, ensuring no trough reinforcing is severed, unless specifically designed for.
- 3.21 CONSTRUCTION JOINTS
Position the ComFlor 60 Construction Joint Former as shown on the drawings, fixed in place through every pre-punched hole.

Application - ComFlor SR

- 3.22 ERECT & PLACE COMFLOR SR
Erect and place the ComFlor SR decking as shown on the drawings with continuous seating at support lines. Lay sheets square and true to line and level and screw together using 12g - 14tpi x 20mm self drilling screws, 1 every 3rd prepunched hole, to ComFlor requirements. Decking sheets shown as continuous on the decking layout should never be cut into more than one sheet.
Fasten to permanent support structure as detailed on the drawings.
Modify this clause if details are not shown on the drawings.
- 3.23 FIX COMFLOR SR EDGE FORMS AND CLOSURE OPTION
Fit to ComFlor requirements.
- 3.24 SITE WELDED SHEAR STUDS
Site flash weld steel stud shear connectors where detailed on the drawings. Provide a Producer Statement confirming compliance with the control procedures of [AS/NZS 1554.2](#).
Delete this clause when steel studs are shop welded or not used.
- 3.25 FORM OPENINGS AND PENETRATIONS IN THE SLAB
Form openings and penetrations as detailed and to ComFlor requirements, ensuring no trough reinforcing is severed, unless specifically designed for.

Application - Reinforcement and concrete

- 3.26 PLACE REINFORCEMENT
Place mesh and reinforcement as detailed and to the requirements of 3112 REINFORCEMENT FOR CONCRETE. Top cover 30mm, unless specifically detailed otherwise.
ComFlor design allows for the inclusion of one single reinforcing bar in each profile trough. The bar size can vary from 10mm to 32mm diameter. The height of the bar should be nominated from the base of the trough, whilst being conscious of commonly available bar chairs.
Refer to the ComFlor 210, ComFlor 80, ComFlor 60 and ComFlor SR brochures and the ComFlor design software for further advice on steel reinforcing design.

- 3.27 CONCRETE PLACEMENT
Before commencing the concrete pour, ensure the decking is clean, free of dirt, grease, debris and water.
Discharge concrete in a controlled manner from no higher than 300mm.
Spread the concrete evenly without excessive heaping.
Maintain a 1 metre working zone between workers in order to minimise local loading of any one part of individual sheets.
Never exceed a construction load of 1.5kPa.

NOTE: The following gets more critical as the ComFlor is used towards the maximum spanning capabilities as set out in the ComFlor design software.

Start the pour sequence over a line of support where the sheet is continuous over that support (i.e. not over a support where the sheet ends or butt join together).
Place the concrete from the centreline of the support outwards, approximately 1/3 into the span each side of the support.

If the sheet ends at the next support line (double span un-propped, single span with 1 prop line, or end span), the remainder of the exposed sheet can then be filled.
If the sheets are continuous over the next support (multiple or propped span configuration) then repeat the above (1/3) process before filling the remaining strip of exposed sheet.

Refer to the ComFlor - The Complete Guide DVD, HERA R4-107, and CMP 1004 and CMP 1005 in addition to [NZS 3109](#) for full instructions on placement and finishing of the concrete.

For assistance with pour sequencing for individual projects, contact a ComFlor representative on 09 271 1792.

Placing concrete in a way to minimise the permanent deformation of the decking is particularly important for construction spans greater than 3 metres.

Finishing - general

- 3.28 SLAB FINISHING
Screed and provide a finish to [NZS 3114](#): table 2, Classes of floor, exterior pavement, invert finishes, and 3121 CONCRETE PLACEMENT. Refer also to CMP 1004 and CMP 1005 for specific comment regarding concrete finishes on suspended floor systems.
Modify this clause if another standard of surface finish is required.

- 3.29 CONCRETE CURING
To minimise cracking and shrinkage deflections, keep concrete damp for seven days.
Keep time between placing and start of curing concrete to an absolute minimum.

- 3.30 PROP REMOVAL
Do not remove temporary props until the concrete has achieved at least 70% of the design strength and the written direction of the design engineer has been obtained.

Finishing - ComFlor 210

- 3.31 CUT COMFLOR 210 SIDE LAP FASTENERS
Cut side lap fasteners leaving 3mm minimum protruding below the deck.
The shear bond clip is partly responsible for the composite action of the decking and is located by a 5.5mm minimum diameter self drilling screw. Screws can be cut off for aesthetic and/or safety reasons.

Completion

- 3.32 CLEAN DOWN
At completion of concrete placement, clean the underside of the steel decking of any grout loss to ensure surface is not damaged or marked.
- 3.33 LEAVE
Leave work to the standard required by following procedures.

3.34 CLEAN UP
Clean up surrounding areas following completion of the concrete placement.

3.35 REMOVE
Remove debris, unused materials and elements from the site.

4. SELECTIONS

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

SELECTIONS is for providing details of the actual selections to be included in the contract works including model numbers, colours and other information necessary to ensure that the correct materials are supplied and installed

ComFlor 210

4.1 COMFLOR 210 - COMPOSITE FLOOR DECKING

Brand/type: ComFlor 210
Gauge: 1.25mm

ComFlor 80

4.2 COMFLOR 80 - COMPOSITE FLOOR DECKING

Brand/type: ComFlor 80
Gauge: ~mm
Sheet length: ~ metres minimum

ComFlor 80 is available ex-stock in 0.75mm, 0.9mm, 1.0mm and 1.2mm nominal metal thickness. Minimum sheet length to be provided by the design engineer.

4.3 SHEAR STUDS

Stud height: ~mm
Diameter: ~mm
Number per pan: ~

118mm LAW (length after weld) x 19mm are the minimum size of welded shear studs suitable for use with ComFlor 80. The length, diameter and number per pan are to be provided by the design engineer.

ComFlor 60

4.4 COMFLOR 60 - COMPOSITE FLOOR DECKING

Brand/type: ComFlor 60
Gauge: ~mm
Sheet length: ~ metres minimum

ComFlor 60 is available ex-stock in 0.75mm, 0.9mm, 1.0mm and 1.2mm nominal metal thickness. Minimum sheet length to be provided by the design engineer.

4.5 SHEAR STUDS

Stud height: ~mm
Diameter: ~mm
Number per pan: ~

98mm LAW (length after weld) x 19mm are the minimum size of welded shear studs suitable for use with ComFlor 60. The length, diameter and number per pan are to be provided by the design engineer.

ComFlor SR

4.6 COMFLOR SR - COMPOSITE FLOOR DECKING

Brand/type: ComFlor SR
Gauge: ~mm
Sheet length: ~metres minimum

ComFlor SR is available ex-stock in 0.75mm, 0.9mm, 1.00mm and 1.25mm nominal metal thickness. Minimum sheet length to be provided by the design engineer.

4.7 SHEAR STUDS

Stud height: ~mm

Diameter: ~mm

Number per pan: ~

93mm LAW (length after weld) x 19mm are the minimum size of welded shear studs suitable for use with ComFlor SR. The length, diameter and number per pan are to be provided by the design engineer.

Steel reinforcement and concrete

4.8 REINFORCING STEEL

Trough bar: ~mm diameter

Bottom cover: ~mm from base of trough

Bar grade: ~

Mesh size: ~

Mesh cover: ~mm

Check with design engineer and modify this clause.

4.9 CONCRETE

Mix: ~

Strength: ~ MPa

Thickness: ~mm

Aggregate size: ~mm nominal max

Admixture: ~

Slump: ~ mm max

Rate of sampling: For compressive strength testing - one sample per ~ m³ (but not less than one for each day of use).

Slab Finish: ~

Check with design engineer for concrete requirements, including use of admixtures.

4.10 TEMPORARY BEARERS AND PROPS

Bearers: ~mm x ~mm

Props: ~mm x ~mm

Timber bearers are minimum 100mm x 100mm (check with design engineer). Modify this clause when Acrow-type steel props are used, or delete propping if not required