CTS Bridges Limited, Abbey Road, Shepley, Huddersfield HD8 8BX

01484 6064166 enquiries@ctsbridges.co.uk www.ctsbridges.co.uk

Design Manufacture and Installation—a one stop shop

Design
CTS in-house Chartered Civil and Structural engineers who come from a strong consultancy background and therefore can create a structural solution from the clients architectural aspirations to give earlier budget confidence and identify critical structural constraints at the outset.

CTS's extensive experience enables them to design structures using readily available material sizes thus avoiding costly wastage or 'over designed' components.
Because CTS design the bridges that they manufacture the cost for design is absorbed/incorporated in the final bridge cost.

Attention to detail ensures cost effectiveness and durability

Manufacture
Manufacture is completed on site. CTS have manufacturing facilities comprising a 4.5 acre site with factory occupying a 2335m^2 footprint. To enable construction we utilise 5 overhead cranes each of a ten tonne lift capacity.
Careful manufacture is undertaken by our experienced time-served joiners and fabricators, including coded welders to the highest standard, all tested to weld procedures to BS EN 10609 in accordance with EN ISO 9606-1.

Installation
CTS offer an installation service for all their bridges and structures. The installations are planned by trained engineers. Site visits are undertaken to assess crane requirements. Risk assessments, method statements, Safe Systems of work are provided.

CTS's bridges and structures have been installed all over the UK and Ireland. Most local authorities have ordered and installed bridges from us. They have been installed over roads, rivers, railways, canals as well as in parks, housing developments, sea-front promenades, business parks and theme parks.

Our installation team incorporate fully trained personnel to ensure safe erection. These include qualified slinger banksmen and "competent persons" as defined by BS7121; the Safe Use of Cranes
For deliveries to site we use a local haulage company that specialises in heavy haulage. Their drivers are experienced in handling and off loading.

CTS have moved complete structures up to 35m long and above from the factory. If access to site precludes this then the superstructure can be taken to site in sections, then welded to one length, ultrasonically tested, painted on the weld affected area prior to lifting into the final position

For further details please contact CTS Bridges Ltd
Tel: 01484 606416
email: enquiries@ctsbridges.co.uk
web: www.ctsbridges.co.uk

Our Approach - Quality with Efficiency

As a family run business with over 30 years experience in the design, manufacture and installation of bridges and structures, we pride ourselves in our specialist knowledge of bridge design .

Because CTS have been building bridges and structures since 1988 and as a market leader in this field, we have both the experience and expertise to ensure that all our products are manufactured using quality materials.

By working with the Client from inception to completion, offering design, manufacture and installation CTS can provide a British made product which offers both value and quality.

Our early input and undertaking of design, combined with our experience of manufacture processes and installation possibilities, ensures the design solution is of a form most suited to construction and installation. In essence we provide a buildable product.

Because CTS design **and** manufacture in house, they can produce designs which accurately match the budgetary restraint of any particular scheme, saving on costly separate Consultancy fees. By taking responsibility for all elements of bridge design, manufacture and installation, confidence in outturn cost at the outset is high.

We pride ourselves in building close relationships with material stockists, galvanisers, painters, haulage and crane companies, to name a few, which allows us to propose optimum processes, materials and configurations which best match the Client brief. As such we can advise on readily available materials, component stock sizes, and manufacture process suitable to the method of construction and purpose; ensuring a product that meets our clients budget.

From complex geometry to standard designs, CTS provides value engineered solutions for the client to ensure their architectural aspirations meet budget constraints.

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web: www.ctsbridges.co.uk

Our Commitment to Quality

CTS is a quality Assured Company as assessed and registered by National Quality Assurance Ltd to BS EN ISO 9001:2008 for the Design, Manufacture of Structural products - Bridges, lock gates and decking. Certificate Number 1590

CTS is on the Register of Qualified Steelwork Contractors - RQSC Certificate Number BWK 006 as approved by the Highways Agency. We are also registered with CHAS, Constructionline and Builders Profile.

CTS hold a FSC chain of Custody certificate No TT-COC-002257 - Licence No. FSC-C017620 for the supply of sustainable FSC timber products

Our workforce comprises coded welders to BS EN ISO 9606-1 2013 and time served joiners.

Our Installation team include a ‘competent person’ as defined by BS 7121 and certified ‘slinger/signaller’.

At CTS Bridges we pride ourselves on producing great products. We have held the CE marking accreditation of the highest level, Execution Class 4 since its implementation in 2014 for design and manufacture of steel structures.

By maintaining EXC 4 we reinforce our dedication to delivering the highest quality in the products and services we offer to our customers.

This is further affirmation that CTS have always been dedicated to Quality, holding ISO 9001:2008 from its outset as BS 5750 on 1st April 1993, continually developing our quality procedures and actively training our staff to the highest level.

For further details please contact CTS Bridges
Tel: 01484 606416
email: enquiries@ctsbridges.co.uk
web: www.ctsbridges.co.uk

Data Sheet—Truss Bridges 1

Truss Bridges

CTS have extensive experience in the design, manufacture and installation of Truss footbridges

We have designed and fabricated Vierendeel steel trusses in a variety of locations and in lengths ranging from 5m upwards.

This type of truss provides a cleaner elevation that lends itself to having various design options such as timber infills on the parapet or having the parapet as a completely separate item with arched top booms as shown on some of the photographs.

Images (top to bottom) :-

34m x 2.5m Bow string truss with steel abutments at Browning Street, Birmingham – Client Shimizu Europe —Ref 1788

36.2m x 3m Warren truss Bridle bridge at Chadkirk, Stockport—Client Bethell Construction—Ref 3720

38.2m x 3m Steel Vierendeel truss with oak detail cycle bridge at Reach Lode, Wicken Fen, Cambridgeshire– Client Bam Nuttal for Sustans—Ref: 3394

34m x 3m Vierendeel truss over River Caldew, Carlilsle —Client Volker Stevin—Ref 3157

Below—24m x 3m Bespoke truss at Cow Bridge—Client Birse—Ref 3621

For further details please contact CTS Bridges
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web: www.ctsbridges.co.uk

Data Sheet—Truss Bridges 2

Truss Bridges

CTS have extensive experience in the design, manufacture and installation of Truss footbridges

We have designed and fabricated steel trusses in a variety of locations and in lengths ranging from 5m upwards.

Truss bridges provide a cleaner elevation that lends itself to having various design options such as timber infills or decorative steel panels on the parapet or having the parapet as a completely separate item with arched top booms as shown on some of the photographs.

Images (top to bottom) :-

29m x 2.2m Steel truss cycle brige over A96 at Suenos Stone, Forres to Findhorn Cycle Route, Scotland—Client Balfour Beatty —Ref 2377

20.5m x 3m Bow Truss Cycle Bridge over A3093,Picket TwentyBridge, Andover, Hants—Client Galamast Ltd—Ref 3885

23.5m x 2.5m Pratt truss at Port Sunlight, Wirral– Client Wirral MBC—Ref: 4289

27m x 5m Pratt Truss with lift shaft at Waitrose, Chester —Client Barr Construction—Ref 3975

Below—17.5m x 3m Pratt with underslungTruss at Dane Bridge, Norhtwich, Cheshire – Client Bam Nuttall—Ref 3599

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Data Sheet—Truss Bridges 3

Truss Bridges

CTS have extensive experience in the design, manufacture and installation of truss footbridges

We have designed and fabricated steel trusses in a variety of locations and in lengths ranging from 5m upwards.

A truss provides a cleaner elevation that lends itself to having various design options such as timber infills on the parapet or having the parapet as a completely separate item with arched top booms as shown on some of the photographs.

Images (top to bottom) :-

34m x 3.5m Bow String Vierendeel cycle bridge at Beaufort Reach, Swansea—Client Dean & Dyball —Ref 2469

32m x 1.5m modified Pratt Truss, River Stour, Bures St Mary, Suffolk– Client Bures Project Association—Ref 1901

45m x 2m Tubular RamTruss, Birmingham– Client Norwest Holst—Ref: 1911

28m x 2m Steel Pratt Truss, Chalk Bridge, Lee Valley—Client Lee Valley Regional Park Authority—Ref 3049

Below—- 25m x 2m Steel Modified Pratt Truss with steps each side at Marbury Country Park, Northwich, Cheshire—Client Cheshire County Council—Ref—2488

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Tel: 01484 606416
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web: www.ctsbridges.co.uk

Data Sheet—Truss Bridges 4

Truss Bridges

CTS have extensive experience in the design, manufacture and installation of truss footbridges

We have designed and fabricated steel trusses in a variety of locations and in lengths ranging from 5m upwards.

A truss provides a cleaner elevation that lends itself to having various design options such as timber infills on the parapet or having the parapet as a completely separate item with arched top booms as shown on some of the photographs.

Images (top to bottom) :-

40m x 2m Bow Arch Vierendeel truss over River Don, Sheffield– Client Balfour Beatty—Ref 4035

18.7m x 2m Vierendeel truss with softwood decorative timber infill parapet at Royalty Fisheries, Christchurch—Client Bournemouth & West Hants Water Authority—Ref 1561

15m x 2.2m Pratt Truss, Beckets Park, Northampton– Client Northampton Borough Council—Ref: 2141

40.65m x 2.5m three span Warren Truss bridge at Castle Marina, Nottingham for Nottingham City Council—Client Whitehouse Construction—Ref 3237

Below—27.5m x 3.5m Tied Arch Truss Bridle/Cycle Bridge over the A391 Carluddon Road, Scredda, Cornwall—Client Cormac Contracting—Ref: 4035

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Data Sheet—Bow String Truss Bridges

Bow String Truss Bridges

The Bow string truss is an elegant and much desired solution for many of our clients. It provides an arch formation and mimics many of the attributes of the tied arch, but allows simpler design and construction detailing, resulting in more cost effective solutions for the Client.

CTS have extensive experience in the design, manufacture and installation of Bow String Truss footbridges. This type of bridge is very popular and has been installed by CTS Bridges all over the UK. Lighting and decorative features can be incorporated within the design.

CTS provide a complete design, build and installation service for this type of bridge.

Images (top to bottom) :-

46m x 3m Tied Arch Vierendeel Truss at Bedford Riverside—Client Leadbitter Bouygues—Ref 4071

18m x 2.5m Vierendeel Bow String Truss at Bedford Place, Bootle—Client Sefton Council—Ref: 3100

34m x 2.5m Bow string truss with steel abutments at Browning Street, Birmingham—Client Shimizu Europe—Ref 1788

46m x 4m Bow Arch Cycle Bridge at Beaufort Road, Swansea—Client—Galliford Try—Ref 3834

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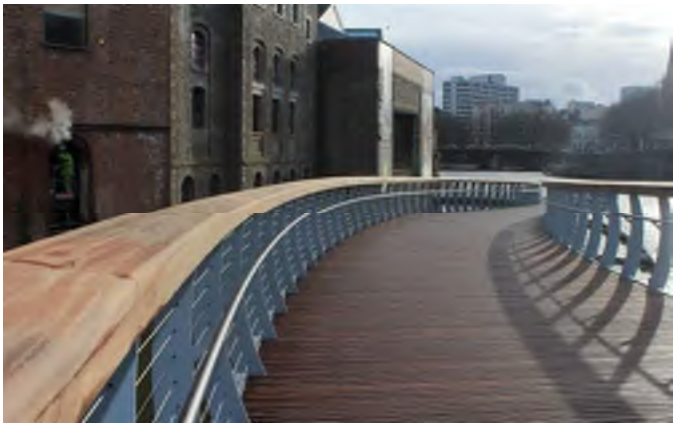
Email: enquiries@ctsbridges.co.uk
Web: www.ctsbridges.co.uk

Data Sheet—Bespoke or Complex Bridges



Bespoke or Complex Bridges

CTS's design team works closely with the client to create structural solutions to their architectural aspirations, thus giving earlier budget confidence and identifying critical structural constraints at the outset.

As well as fulfilling the aesthetic brief, buildability and safe installation is also critical to the design and CTS's expertise in these fields ensure these are taken into consideration. CTS' Chartered Structural and Civil Engineers can provide initial advice, design proposals and value engineering to ensure these high profile, high value projects are delivered on time and on budget.

Images (top to bottom) :-

91m x 2.5m Multi-span curved in plan and elevation at Finzels Reach, Bristol—Client Dickson Powell—Ref 4051

24m x 3m Bespoke steel frame bridge with illuminated parapet at Chelsea Creek —Client Elite Landscapes—Ref: 4234

33m x 3.5m Skewed Bespoke Butterfly Arch Truss at Piccadilly Place, Manchester—Client Carillion—Ref 2505

36m long with varied width Triangular Steel truss with cantilevered deck at New Islington, Manchester—Client GB Building—Ref 3998

Below: 30m x 2m Tubular Steel Arch bridge at Christ Church College, Oxford—Client Avon Construction—Ref 3964

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Email: enquiries@ctsbridges.co.uk
Web: www.ctsbridges.co.uk

Data Sheet—Railway Bridges

Railway Bridges

CTS have extensive experience in the design, manufacture and installation of footbridges over live railways.

We have designed and fabricated timber, steel and timber and steel only structures to be used in these locations taking a variety of structural forms.

The images here show some of the basic forms of construction suitable for this use. We also have experience fabricating structures incorporating steps, ramps, lighting and decorative features.

Images (top to bottom) :-

27m x 2.45m steel footbridge with 2 sets of steps and supporting columns at each side at Bootle Oriel Road Station—Client Kier Construction—Ref 2948

56m x 3m Warren Through truss footbridge at Anker Valley, Tamworth. Client Amey / Bellway Homes—Ref 4304

28m & 22m x 2.5m Steel Pratt through truss bridges + 101m of ramps at The Longford Centre, Feltham —Client Dyer and Butler—Ref 2671

17 x 2m Main Span U Frame Stiffened Plate girder with SHS top member and associated steps at Caldene Station, Mytholmroyd, West Yorkshire—Client Balfour Beatty—Ref 3307

Below:-

41.3m (3 span x 2.5m Railway bridge with steps at Thornaby Station, Stockton on Tees—Client Birse Civils Ltd—Ref 4006

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Data Sheet—Railway Bridges

Railway Bridges

CTS have extensive experience in the design, manufacture and installation of footbridges over live railways.

We have designed and fabricated timber, steel and timber and steel only structures to be used in these locations taking a variety of structural forms.

The images here show some of the basic forms of construction suitable for this use. We also have experience fabricating structures incorporating steps, ramps, lighting and decorative features.

Images (top to bottom) :-

22m x 1.8m steel truss with 2 sets of steps and supporting trestles at Lockhouse Road, Sheffield—Client Sheffield City Council—Ref 2941

48m x 2m Warren Through truss footbridge at Battishorne Farm, Nr Honiton, Devon—Client Devon County Council—Ref 2447

24m x 2m U Frame Stiffened steel warren truss with anti climb steeples and timber infill parapet at Grange Hall, Forres, Scotland—Client—Balfour Beatty—Ref 2377

26.2 x 3m Steel truss with oak parapet infills panels at Cefni—Client Thyssen Construction—Ref 2233

Below:-

8.65m x 1.6m Steel Vierendeel Truss bridge with handrail to steps at Tynemouth —Client G & B Civil Engineering—Ref 3393

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Data Sheet—Cable Stay Bridges

Cable Stay Bridges

CTS have extensive experience in the design, manufacture and installation of Cable Stay footbridges

They are ideal for longer span bridges and give an elegant and slender look whilst making a statement and creating a focal point.

The cable towers can be a variety of shapes and can incorporate 'features' to make them a unique design. The superstructures can be trusses or beams held by cables which suspend the bridge from the tower.

We work with the client to provide value engineered solutions and provide advice on suitable styles and cable options.

CTS provide a complete design, build and installation service for cable stay bridges.

Images (top to bottom) :-

151m x 2.5m Multi Span cable stay bridge over a road, railway and river at Ebbw Vale, Ebbw Vale, South Wales—Client Dawnus—Ref 3920

23.4m, 5.5m & 5.5m x 1.5m three span cable stay beam bridge, Attingham Park, Shrewsbury—Client National Trust—Ref 3241

58m x 3m wide Cable Stay steel beam bridge with steps, Southbridge, Upper Nene Valley, Northampton—Client Jackson Civil Engineering— Ref 2400

122m x 2.0m Cable Stayed modified Pratt Truss Bridge at Mortain —Client North Dorset District Council—Ref 1476

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Tel: 01484 606416
email: enquiries@ctsbridges.co.uk
web: www.ctsbridges.co.uk

Data Sheet—Cycle Bridges

Cycleway Bridges—Sheet 1

CTS have extensive experience in the design, manufacture and installation of cycleway bridges.

We design and fabricate these bridges in a variety of styles including all timber, all steel or combinations of steel and timber and FRP (Fibre Reinforced Polymer). The most suitable material depends on the length of bridge required and CTS can give advice on the most suitable form of construction for your particular scheme.

Cycleway bridges have a parapet height of 1.4m and will also have a non -slip surface on the deck to ensure the safety of cyclists and other users.

Our cycle bridge range include off-the-shelf designs to bespoke structures that enhance the environment as well as keeping cyclists safe.

Images (top to bottom) :-

116m x 3m cycle ramps and 16m x 3m bespoke steel truss cycle bridge with hardwood decorative spindles, Hi-Grip Plus non-slip deck with buff coloured surface at A11 Bow Riverside, Lee Valley—Client May Gurney—Ref 3523

33.88m x 3.5m Warren through truss cycle bridge at Mitchells Way, Fulstone to Wombwell, Barnsley—Client Laing O Rourke—Ref 3544

34m x 3.5m Vierendeel Bow Arch cycle bridge, Beaufort Reach, Swansea—Client Dean & Dyball—Ref 2469

38.2m x 3m Steel Vierendeel truss with oak detail cycle bridge at Reach Lode, Wicken Fen, Cambridgeshire on Sustrans cycle route—Client Bam Nuttall—Ref: 3394

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Data Sheet—Cycle Bridges 2

Cycleway Bridges—Sheet 2

CTS have extensive experience in the design, manufacture and installation of cycleway footbridges

Our understanding of and close relationships with material stockists, galvanisers, painters and haulage and crane companies, to name a few, allows us to propose optimum processes, materials and configurations which best match the Client brief. As such we can advise on readily available materials, components in stock sizes, and manufacture process suitable to the method of construction and purpose and can ensure a product that is economical for the customer.

Our cycle bridge range includes simple off-the-shelf designs to bespoke designs that enhance the environment as well as keeping cyclists safe.

Images (top to bottom) :-

12m x 3.9m Steel beam cycle bridge with hardwood Type B parapet at Ladywell Fields, London—Client Fergal Contracting—Ref 2989

25m x 4m cycle bridge with hardwood Type A 1.4m high parapet at Broughton Brook, Milton Keynes—Client English Partnerships—Ref 2430

15m x 3m Steel beam cycle bridge steel parapet 1.4m high at Baswich Lane, Stafford — Client CLM—Ref 3934

20m x 2m Hardwood truss cycle bridge at A82 Lochybridge to Torlundy Cycleway—Client Transport Scotland—Ref 3035

Below : 7.5m x 3m softwood cycle bridge with Type A parapets 1.4m high and Hi-Grip Plus non-slip surface on deck at Cocker Beck, Darlington—Client Darlington Council—Ref 3081

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Data Sheet—Bridle Bridges—Steel

Bridleway Bridges—Steel

CTS have extensive experience in the design, manufacture and installation of bridleway bridges.

We design and fabricate these bridges in a variety of styles including all timber, all steel or combinations of steel and timber. The most suitable material depends on the length of bridge required and CTS can give advice on the most suitable form of construction for your particular scheme. As a guide, a steel beam bridge is ideal for bridges over 10m long and a steel truss option is ideal for bridges over 18m long.

Bridleway bridges will have a parapet height of 1.8m and have a solid infill kicker rail at the base of the parapet. We provide a durable non-slip surfacing on the deck of the bridge that reduces the noise of the horses hooves.

Images (top to bottom) :-

27m x 3m Vierendeel truss bridle bridge at Barnburgh Colliery reclamation site, Barnsley—Client Barnsley MBC—Ref 1980

16m x 3m Tied Arch truss bridle bridge on Spen Valley Greenway at Scout Hill, Dewsbury - Client—J N Bentley—Ref 3287

27.5m x 3.5m Tied Arch bridle bridge over A391 Carluddon Road, Scredda, Cornwall—Client Cormac Contracting—Ref 4035

9.3m x 3m Galvanised steel bridle bridge with rubber matting on deck at Darlington—Client Darlington Council—Ref 3571

Below: 40m x 3m U frame stiffened Pratt Truss Bridle Bridge at Copley, Halifax—Client Calderdale Council—Ref 4239

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Data Sheet— Bridle Bridges—Timber / Steel

Bridleway Bridges—Timber or Steel/Timber combinations

CTS have extensive experience in the design, manufacture and installation of bridleway bridges.

We design and fabricate these bridges in a variety of styles including all timber, all steel or combinations of steel and timber. The most suitable material depends on the length of bridge required and CTS can give advice on the most suitable form of construction for your particular scheme.

Bridleway bridges will have a parapet height of 1.8m and have a solid infill kicker rail at the base of the parapet. We provide a durable non-slip surfacing on the deck of the bridge that reduces the noise of the horses hooves.

Images (top to bottom) :-

10m x 2.3m Steel & timber bridle bridge with steel beams, softwood parapet, hardwood Hi-Grip Excel deck, at Leadmill, Client North Yorkshire CC—Ref 3382

49m Stress laminated bridle bridge with non-slip deck surface at Far Moor, Nr Horton in Ribblesdale. Client Houseman and Falshaw—Ref 3448

55m O/a (3 span) x 2.5m wide Steel beam bridge with hardwood parapet and deck over River Dearne, Mexborough. Client Doncaster MBC Ref 3448

17m x 3.5m Steel and Timber Bridle/Cycle Bridge at Lepton, Huddersfield with Steel beams, galvanised with a timber fascia, timber parapet 1.8m high with solid kicker, Hi-Grip Excel non-slip deck—Client Ben Bailey Homes—Ref 2830

Below: 30m x 2.6m Steel and Timber Cycle/Bridle bridge at Lochwinnock, Scotland with galvanised spliced steel beams, hardwood Type A infills with steel posts 1.8m high, hardwood Hi-Grip Excel non-slip deck—Client: Sustrans—Ref 2626

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email: enquiries@ctsbridges.co.uk
web: www.ctsbridges.co.uk

Data Sheet—Steel Beams & Parapet Bridge

Steel Beams & Parapet Bridges

Steel beam bridges are ideal for spans from 10m—18m but longer spans can be achieved.

The beam bridges can be delivered fully assembled or in kit form where access is restricted and for longer spans, the beams can be spliced together, thus making this form of construction one of the most versatile of the longer span bridges.

They are economical, practical and suitable for use as pedestrian footbridges, bridle bridges, cycle bridges and for vehicle access bridges.

All bridges are designed to Eurocode 3 and BS 5268 with a design live load of 5kN/m2

Photos from top left:

37m x 2.5m Steel curved beam bridge with bespoke steel parapet, hardwood deck with Excel non slip inserts at Hungerford—Client Alun Griffiths—Ref 3661

30.5m x 2.0m steel spliced beams, steel parapet with motif and steel with non-slip deck in Huddersfield —Client Totty Construction—Ref 1820

18m x 1.2m Galvanised steel beams with Type A parapet. Hardwood deck with Excel non slip inserts—Client Bedford Council—Ref 4367

8.3m x 1.5m Steel beams, steel parapet Type A modified and steel non-slip deck at Chantry Fields—Client North Dorset Council—Ref 1006.

17.5m x 1.3m Steel beams, steel parapet Type A (vertical infills), steel non-slip deck at Dickens Heath Canal—Client Redrow Homes—Ref 1218

Below: 20m x 3.5m steel beams, painted, Steel Type D parapet with mesh infills, hardwood Hi-Grip Excel deck at Dartford—Client F M Conway—Ref 3358

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Email: enquiries@ctsbridges.co.uk
Web: www.ctsbridges.co.uk

Data Sheet—Steel & Timber bridges

Steel and Timber Bridges

Steel and Timber bridges are one of the most versatile bridge types we manufacture. They are economical, practical and suitable for use as pedestrian footbridges, bridle bridges, cycle bridges and for vehicle access bridges. They are ideal for spans from 10m up to 18m but longer spans can be achieved.

Bridges are designed to current Eurocodes for a minimum pedestrian loading of 5kPa. Equestrian and vehicular access requirements can also be accommodated within the steel and timber bridge designs. This style of bridge is frequently adopted by Local Authorities and CTS Bridges' chartered engineers can assist in the compilation of Approval in Principle documentation for the project.

CTS provide a complete design, build and installation service for these bridges.

Images (top to bottom) :-

24.2m x 1.5m Steel beams, cambered and painted, hardwood parapet Type A (vertical infills) and hardwood Hi-Grip Excel non-slip deck for Glyndwr District Council, Wales—Client Jones Bros (Ruthin)

17.3m x 1.2m Steel beams painted, Hardwood Type B (post & 3 rail) parapet, Hardwood Excel deck—Client Lincolnshire CC—Ref 4913

11m x 2.5m steel beams fitted with hardwood fascia. Hardwood Type C (cross rail) parapet and hardwood Hi-Grip Plus deck at Cobalt Business Centre, Newcastle—Client Brambledown Landscapes—Ref 3047

18m x 2.44m steel beams, galvanised. Hardwood Type A parapet (vertical infills) and hardwood Hi-Grip Plus deck at Sainsbury's, Willowburn—Client Mansell Construction Services—Ref 3056

Below: 18m x 2m Steel and FSC hardwood bridge with modified Type A parapet at A95 Highlands—Client Bear Scotland—Ref 4281

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Web: www.ctsbridges.co.uk

Data Sheet—Steel beam bridge with timber fascia

Steel beam bridges with timber fascia

Steel and Timber bridges are economical, practical and suitable for use as pedestrian, bridle cycle vehicle access bridges.

A timber fascia can be fitted to the steel beams to give the appearance of an all timber bridge. For bridges over 10m long the timber fascia solution provides the look of a timber bridge at a more economical cost than having an all timber dowel laminated bridge.

Steel and timber bridges are ideal for spans from 10m up to 18m but larger spans can be achieved.

All bridges are designed to Eurocode 3 and/or BS 5268 with a design live load of 5kN/m2

CTS provide a complete design, build and installation service for these bridges.

Images (top to bottom) :-

20.5m x 1.25m Steel and FSC hardwood bridge with Type A (vertical infills) parapet, Hi-Grip Excel non-slip deck at Ulley Reservoir, Sheffield—Client Vinci Construction—Ref 3379

12m x 3.9m steel and FSC hardwood access bridge, Type B parapet at Ladywell Fields, Lewisham—Client Fergal Contracting—Ref 2989

11m x 2.5m steel and FSC hardwood bridge with Hardwood Type C (cross rail) parapet at Cobalt Business Centre, Newcastle—Client Brambledown Landscapes—Ref 3047

13.5m x 1.85m Steel and FSC softwood bridge with Softwood Type B (post & rail) parapet at Penkridge—Client South Staffordshire Council—Ref 3542

Below: 11.2 x 1.5m Steel & oak bridge at Neville Arms, Medbourne, Leics—Client Leicestershire CC—Ref 3218

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web: www.ctsbridges.co.uk

Data Sheet—Steel & Timber ''Standard' Bridges

Steel & Timber—Off the Shelf Bridges

Steel and Timber 'off the shelf bridges' are ideal for spans from 10m up to 18m. By utilising readily available steel and timber sizes we can offer this economical range of footbridges to suit locations, budgets, spans & aesthetics.

Steel and Timber 'Off the Shelf' bridges start at 10m long and rise in 1m increments to 18m. Widths available are 1m, 1.2m, 1.5m, 2.0m

Bridges are designed with a design live load of 5kN/m2

In order to specify a CTS steel and timber off the shelf bridge – e-mail us with the following information:

Overall length of bridge
Clear walkway width (internal walkway)
Cambered or flat main beams
Parapet Material—Hardwood or softwood
Parapet Style—Type A or Type B
Deck Material —Hardwood or softwood
Deck Finish—Hi-Grip Standard or Excel (non-slip inserts)

CTS provide a design, build and installation service for these bridges.

Images (top to bottom) :-

18m x 1.5m Steel beams, Hardwood Type A parapet and deck with Hi-Grip Excel non-slip inserts—Client South Tipperary Council—Ref 3061

10m x 1m Steel beams, Hardwood Parapet Type B (Post and rails) and Hardwood Standard Deck—Client Strutt and Parker—Ref 215

18m x 1.2m Steel beams, Hardwood Type B (post & 3 rail) parapet, hardwood Hi-Grip Excel deck—Client Chalmers Construction—Ref 3015

18m x 2.0m Steel beams, Hardwood Type A parapet (vertical infills), Softwood Hi-Grip Plus Deck—Client Mansell Construction Services — Ref 3056

Below: 11m x 1.2m Steel beam, softwood Type B parapet, softwood Excel deck at Chorley, Lancashire—Client Capita—Ref 4314

For further details please contact CTS Bridges
Tel: 01484 606416
email: enquiries@ctsbridges.co.uk
web: www.ctsbridges.co.uk

Data Sheet—Ornamental Bridge (over 10m)

Ornamental Bridges—over 10m

Ornamental bridges are made to order to suit the client's requirements in a range of styles to suit locations, budgets, spans & aesthetics.

CTS's ornamental bridges enhance many Private Gardens, Estates, Public Parks & Gardens, Housing Developments and Theme Parks etc.

Available in Steel, Hardwood or Softwood and with FSC certification.

All softwood used is pre-treated for a 30 year service life. All hardwood used has a 40 year service life.

Ornamental bridges can have solid timber beams, glue-laminated beams, dowel-laminated beams or steel beams

CTS can provide an installation service for the bridge onto abutments prepared by others to any part of the UK

Images (top to bottom) :-

42m (3 span) x 2.29m Chinese Bridge at Dumfries House, Cumnock, Scotland—Client Land Engineering—Ref: 4250

15m x 1.8m steel beams with hardwood fascia, parapets and deck, golf buggy bridge at Carden Hall—Client Carden Hall Estates —Ref 3173

15m x 1.52m Dowel laminated hardwood bridge with Type C parapet for Sparkford Sawmills— Ref 1289

12.86m x 1.373m teak bridge onto a steel frame at Glympton Estate—Client Glympton Park Holdings— Ref 1470

Below—11.5m x 1.5m Steel beams spliced to allow for access and fitted with a hardwood fascia, parapet and deck at Roundhay Park, Leeds — Client Waterers Landscapes—Ref 2278

For further details please contact CTS Bridges
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Data Sheet—Ornamental Bridge (under 10m)

Ornamental Bridges—under 10m

Ornamental bridges are made to order to suit the client's requirements in a range of styles to suit locations, budgets, spans & aesthetics.

Our ornamental bridges have enhanced Private Gardens, Estates, Public Parks & Gardens, Housing Developments and Theme Parks.

Available in Hardwood or Softwood and with FSC certification.

All softwood used is pre-treated for a 30 year service life. All hardwood used has a natural durability in excess of 40 years.

Ornamental bridges can have solid timber beams, glue-laminated beams, dowel-laminated beams or steel beams

The bridges can be delivered in kit form or fully assembled to any location in the UK. CTS also provide an installation service.

Images (top to bottom) :-

4.4m x 1.5m glulaminated hardwood bridge installed by CTS in a private garden, York—Client: Private customer— Ref 183

6.87m x 1.2m ornamental softwood bridge in Sulby, Isle of Man—Client: Private Customer—Ref 2765

3.0m x 1.7m ornamental bridge to take ride on mower, Huddersfield — Client: Private Customer— Ref 94315

3.6m x 2m Monet Style hardwood bridge in Burscough, Lancashire— Client: New Environment Ltd—Ref 2152

Below—6.3m x 2m softwood rustic style bridge at Lightwoods Park, West Midlands—Client: Heritage Building & Conservation—Ref 4200

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Data Sheet -Timber Bridges

Timber Bridges

Timber bridges are available in a whole range of styles to suit locations, budgets, spans and aesthetics.

All CTS's timber bridges are designed to BS 5400 and BS 5268 or Eurocode 5 with a design live load of 5kN/m2 (crowd loading).

Available in Hardwood or Softwood
All softwood is pre-treated for a 30 year service life
All hardwood has a natural durability in excess of 40 years

Timber bridges can have solid beams, glue-laminated beams, dowel-laminated beams or take the form of a truss.

Our timber bridges can be delivered in kit form or fully assembled to any location in the UK.

CTS can provide an installation service for the bridge onto abutments prepared by others.

Images (top to bottom) :-

52m x 1.5m (7 span) Ekki hardwood bridge at Cruden Bay, Aberdeenshire—Client Aberdeen Council—Ref 4072

28m x 2m dowel laminated Oak bridge with Steel 'A' frame at Moira, Leicestershire—Client Leicestershire County Council—Ref 2157

28m x 3.7m FSC Softwood 4 span bridge with Type A parapet at Kidbrooke Village, Lewisham for Berkeley Homes—Ref 4144

20m x 2m Hardwood Timber Truss cycle bridge, A82 Lochybridge to Torlundy Cycleway—Client Transport Scotland—Ref 3035

Below: 10 x 1.5m FSC Softwood Bridge with Type B parapet, Carnoustie—Client Scottish Woodlands—Ref 3416

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Data Sheet -Timber Bridges

Timber Bridges

Timber bridges are available in a whole range of styles to suit locations, budgets, spans and aesthetics.

All CTS's timber bridges are designed to BS 5400 and BS 5268 or Eurocode 5 with a design live load of 5kN/m2 (crowd loading).

Available in Hardwood or Softwood
All softwood is pre-treated for a 30 year service life
All hardwood has a natural durability in excess of 40 years

Timber bridges can have solid beams, glue-laminated beams, dowel-laminated beams or take the form of a truss.

Our timber bridges can be delivered in kit form or fully assembled to any location in the UK.

CTS can provide an installation service for the bridge onto abutments prepared by others.

Timber bridges are sustainable and low maintenance and are ideal for rural locations.

Images (top to bottom) :-

6.6m x 1.8m Ekki hardwood bridge iwith Type A parapet nstalled by CTS at Aberfeldy, London Client Willmott Dixon—Ref 4154

26m x 2m (4 span) Hardwood cycle bridge,at Newton Leys—Client Taylor Wimpey—Ref 3824

8.4m x 1.8m Hardwood bridge installed with hiab vehicle at Howard Park, Letchworth—Client UPM Tilhill—Ref 3513

7.5m x 2m softwood cycle bridge with Type A parapet 1.4m high—Hi-Grip Plus deck—Client Darlington Council—Ref 3081

Below: 8.8m x 1.5m Ekki hardwood with Type C (cross rail) parapet at Ceredigion—Client Hafod Trust—Ref 4335

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Data Sheet—Timber Kit Bridge

Timber Kit Bridges

CTS timber kit bridges offer great value for money. They are designed to use readily available timber sizes to keep costs to a minimum.

Available in Hardwood or Softwood and with FSC certification
All softwood is pre-treated for a 30 year service life and Hardwood is naturally durable with a service life of 40 years.

All our kit bridges are delivered with a parts list, assembly drawing and assembly instructions. All components are pre-drilled for quick and easy assembly on site. All fittings are provided. CTS can provide an installation service.

CTS kit bridges are all designed for 5kN/m2 (crowd loading) and provide an economical yet safe bridge solution for the smaller length bridge. Delivery is available to all areas of UK.

Standard lengths are 2.7m, 3.3m, 3.9m, 4.5m, 5.1m, 5.7m, 6.3m 6.9m. 7.5m, 8.1m, 9.0m, 9.5m, 10m, 10.5m .The standard widths are 450mm, 825mm, 1.2m, 1.5m, 2.0m but we can manufacture to any size required

Images (top to bottom) :-

6.5m x 1.0m hardwood kit bridge installed by CTS at Blackmoorfoot Reservoir, Huddersfield—Client Morrison Construction—Ref 1311

9m x 1.2m softwood kit bridge delivered to Depot for site installation by others—Client Sheffield City Council—Ref 2432

9.2m and 5.8m spans x 1.2m softwood kit bridge —Client Scottish Orienteering Club Plant—Ref 3606

5.8m x 526mm softwood kit bridge with splayed parapets with steps—at Oliver Gill, Dentdale. Client Yorkshire Dales National Park —Ref 3454

Below: 4.5m x 450mm softwood kit bridge with played parapets assembled by volunteers—Client Yorkshire Dales NPA—Ref 2569

For further details please contact CTS Bridges
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Data Sheet—Fibre Reinforced Polymer (FRP) Bridges

FRP— Fibre Reinforced Polymer Composite Bridges

Key Benefits

The greatest benefit for using FRP material is for bridges in remote or environmentally sensitive areas where use of normal lifting plant is not possible. They are also extremely useful in situations where the environment is hostile, access for maintenance is restricted and thus expensive or it is considered that in reality no maintenance will be undertaken.

Durability

FRP material is resistant to UV rays, which has no affect on the resin within the profile unlike the extruded plastics produced from recycled material. The material is also resistant to salt water and a diverse range of chemicals.

Our FRP composite bridges have a 120 year design life as have the steel and timber bridges we design.

We construct the bridges using stainless steel bolts and fixings to complement the extremely long service life of the FRP material.

Fibre Reinforced Polymer bridges are robust and will resist casual attempts at vandalism better than softwood and on a par with hardwood.

Superficial damage will have no affect on service life as it would with steel or softwood as the material does not rely on any applied protective systems for its extended service life.

The FRP/GRP material we use has a phenolic coating and conforms to class B of European standard EN 13501 for fire resistance.

More information on the profiles and examples of structures www.Fiberline.com

Quick Guide to Key Benefits

Lightweight—Can be placed in remote areas with poor access by manual handling or helicopter

Easy to assemble and quick to install—Saves time on site

Extremely durable—Has long maintenance free service life in excess of 30 years

Minimal maintenance—Whole life maintenance costs minimised.

Images (top to bottom)

5.8m x 1.25m FRP bridge at Swanage, Poole, Dorset —Client Avon Construction Ltd—Ref 4548

7m x 1m FRP Bridge at Chiswick Hall, Essex—Client Ringway Jacobs/Essex CC—Job 4457

12.5m x 2m FRP Footbridge at Earlsburn Reservoir, Scotland - Client George Leslie—Ref 3830

8m x 1.2m FRP bridge at Blinkbonny, Scotland—Client Murdoch MacKenzie—Ref 3858

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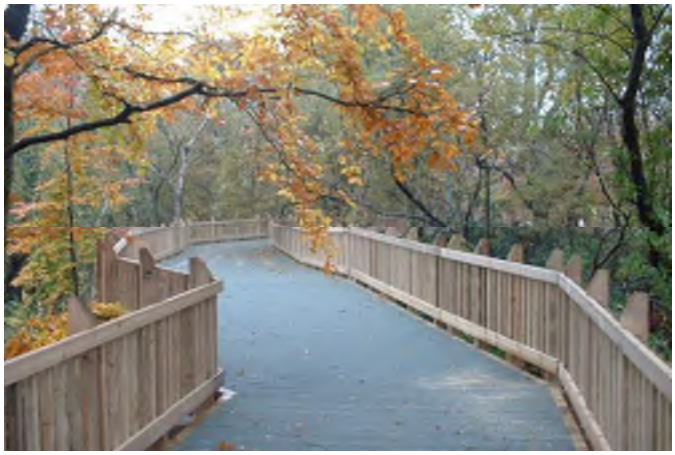
Data Sheet—Landscape Structures — Aerial Walkways



Aerial Walkways

CTS specialise in the design, manufacture and installation of bespoke structures including aerial walkways.

These unique structures are always site specific and vary tremendously depending on the ground conditions, height above ground, site access and budgets. The styles we produce vary from rustic to elegant depending on the clients aspirations.

Because we offer a one stop shop, we can give guidance as to the most suitable materials, method of erection and costings.

Our in house design team have extensive expertise in creating these structures and our engineers have over 30 years timber engineering experience.

We specialise in both timber and steel construction which means we can produce this type of walkway in a variety of materials utilising the most cost effective methods to give the customer value for money.

Our installation teams work nationwide and have the necessary expertise and experience to ensure the work is carried out safely and on time.

Images (top to bottom)

Supply and fit of larch decking with Hi-Grip Excel inserts and larch handrail at Westonbirt Arboretum, Gloucestershire—Client SH Structures—Ref 4137

100m long Aerial walkway at Stover Park, Bovey Tracey—Client Devon CC—Ref 2083

120m x 1.2m Softwood Aerial Walkway, Maidstone River Park—Client Fountain Forestry—Ref 1622

60m x 2.5m Aerial walkway, River Wallkham, Tavistock—Client Devon CC —Ref 2930

Below: Steel supports below Aerial Walkway, Stover Park, Devon—Client Devon CC—Ref 2083

For further details please contact CTS Bridges
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web: www.ctsbridges.co.uk

Data Sheet - Landscape Structures—Bespoke boardwalks

Landscape Structures—Bespoke Boardwalks

CTS specialise in the design, manufacture and installation of boardwalks in both timber and steel

We offer a one stop shop which includes design, manufacture and installation and we can give guidance as to the most suitable materials, method of erection and costings.

Our in house design teams have extensive expertise in creating these structures and our engineers and workforce have over 30 years experience. This means we can take a concept drawing and create a design that meets the customers requirements or we can work to supplied design drawings.

We produce these types of structures in a variety of materials including softwoods, hardwoods, steel or composites, utilising the most cost effective methods to give the customer value for money.

Our Hi-Grip Excel non-slip deck boards can be fitted to structures to provide a safe walking surface for pedestrians and other users.

Our installation teams work nationwide and have the necessary expertise and experience to ensure the work is carried out safely and on time.

Images Top to Bottom:

88m x 4m Hardwood cantilevered jetty at Paddington Basin, London—Client Fitzpatrick Contractors—Ref 2182

91m x 2m FSC Softwood Boardwalk at Wixams. Bedfordshire—Client Buckingham Group—Ref 3731

70m x 2m cantilevered elevated boardwalk/cycleway at Cefni Shared Use Path, Anglesey—Client Dawnus—Ref 2637

32m x 2m Steel boardwalk at Bidston Moss, Wirrall—Client Horticon Ltd—Ref 2957

Below: 56m x 3m larch boardwalk at Centre Parc, Woburn—Client Balfour Beatty—Ref 3908

For further details please contact CTS Bridges
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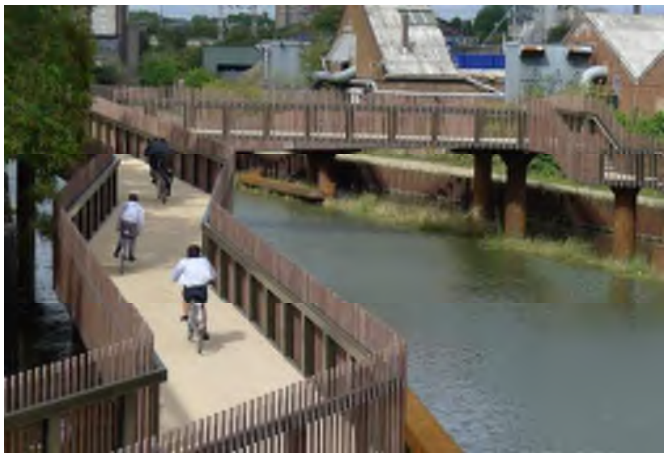
Data Sheet - Landscape Structures—Bespoke Structures



Landscape Structures—Bespoke Structures

CTS specialise in the design, manufacture and installation of bespoke structures in both timber and steel.

These include ramps, steps, piers, jetties, pergolas, stage areas, viewing platforms, fishing platforms, roof terraces, boardwalks and lock gates etc

We offer a one stop shop which includes design, manufacture and installation and we can give guidance as to the most suitable materials, method of erection and costings.

We have over 30 years experience in manufacture and installation of these types of structures. This means we can take a concept drawing and create a design that meets the customers requirements or we can work to supplied design drawings.

CTS produce structures in a variety of materials including softwoods, hardwoods, steel or composites, utilising the most cost effective methods to give the customer value for money.

Our installation teams work nationwide and have the necessary expertise and experience to ensure the work is carried out safely and on time.

Images (Top to Bottom):

116m x 3m cycle ramps and 16m x 3m bespoke steel truss cycle bridge with decorative spindles, Hi-Grip Plus non-slip deck at A11 Bow Riverside, Lee Valley—Client May Gurney—Ref 3523

Bespoke steel viewing platform and ramps at Bancroft Gardens, Stratford On Avon—Client English Landscapes—Ref: 3119

Bespoke Steel & timber spiral tapering ramp at Saville Rose Gardens, Surrey for Crown Estates—Client Kings Landscapes—Ref 3330

Supply and fit of larch deck with Hi-grip Excel non slip inserts and larch handrail to aerial walkway at Westonbirt Arboretum—Client SH Structures—Ref 4137

Below : Lock Gates manufactured and installed by CTS

For further details please contact CTS Bridges
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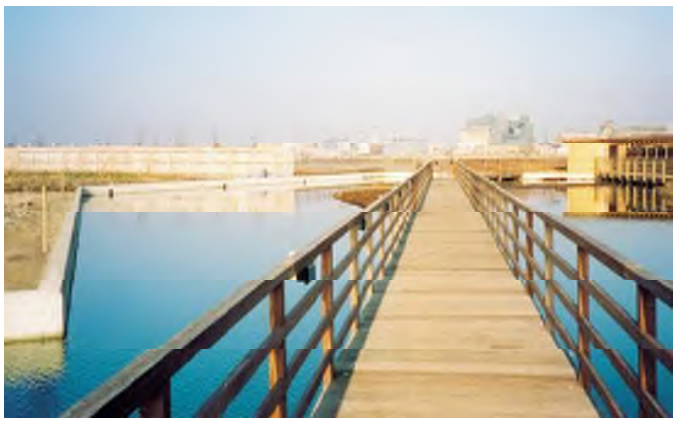
web: www.ctsbridges.co.uk

Data Sheet—Landscape Structures—Low level boardwalks



Landscape Structures—Low level boardwalks

CTS specialise in the design, manufacture and installation of boardwalks in both timber or steel

These unique structures are always site specific and vary tremendously depending on the particular scheme.

Because we offer a one stop shop, we can give guidance as to the most suitable materials, method of erection and costings.

Our in house design team have extensive expertise in creating these structures and our engineers have over 30 years engineering expertise.

Because we specialise in this type of structure we can provide the most cost effective methods to give the customer value for money.

Our installation teams work all over the country and have the necessary expertise and experience to ensure the work is carried out safely and on time.

Images (Top to bottom)

109m x 3.9m FSC hardwood boardwalk at Bradford City Park, Bradford—Client Birse Civils—Ref 3631

62m x 3m FSC Ekki Timber boardwalk at Clapham Common—Client F M Conway—Ref 3610

150m x 2m Boardwalks at O2 Arena, Greenwich, London—Client Edmund Nuttall—Ref 1491

20m x 2m Low level timber boardwalk & 12m x 2m bridge at Cefni Reservoir, Bodfford, Anglesey—Client Thyssen Construction—Ref 2233

Below—Ekki Hi-Grip Excel boardwalks at coastal promenade, Newcastle, County Down, NI—Client FP McCann— Ref 2705

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