

EJOT U.K. Limited, Hurricane Close,  
Sherburn Enterprise Park,  
Sherburn-in-Elmet, Leeds LS25 6PB  
Tel: +44 1977 68 70 40  
Fax: +44 1977 68 70 41  
Email: [info@ejot.co.uk](mailto:info@ejot.co.uk)  
[www.ejot.co.uk](http://www.ejot.co.uk)

## The EJOT Range includes:-

- Self drill/tapping fasteners
- Self tapping fasteners
- Colorfast – injection moulded head fasteners
- PCC – Powder coated fasteners.
- Single ply, insulation and deck fasteners.
- Rivets
- Spray painted rivets
- Dektite pipe flashings
- Hercules self-tapping masonry anchors
- Hammer Set Anchors
- Screw Set Anchors
- Stud Anchors
- Chemical Anchors
- Fillers
- Tapes
- Expanding Tapes
- Sealants
- Tools and Accessories
- Drill Bits
- Packers
- Nuts and bolts



## Flat Roofing Made Simple

**Flat roofing fastening system for fixing thermal insulation and waterproofing membranes to concrete, plywood and steel decking**







## The Quality Connection

### EJOT Building and Construction Division

EJOT designs, develops and manufactures a range of fixings for securing flat roof membranes to profiled steel, concrete, timber boarding, OSB, plywood, aerated concrete, hollow blocks and wood slabs.

As well as fasteners for flat roofing, EJOT's Building and Construction Division manufactures fasteners for:

- Metal roofing and cladding
- External thermal insulation composite systems (ETICS)
- Insulated rainscreen cladding systems
- Offsite modular construction
- General building and construction

The EJOT Building and Construction Division has been established for 25 years, during this time EJOT has had a dramatic impact in key areas of the industry.

### The Quality Connection

The EJOT ethos is 'The Quality Connection' and demonstrates the company's ability to provide solutions to fixing problems and form strong and beneficial partnerships at all levels.

Working closely with system manufacturers and specifiers, EJOT provides application-specific products, which have received widespread approval from specifier, engineer, buyer and installer.



Established in Germany in 1922, EJOT has grown and flourished to become a global presence in specialist fastenings throughout engineering and construction.



The Single Ply Roofing Association (SPRA) represents membranemanufacturers, associated component manufacturers and specialist sub contractors and aims to ensure the delivery of best value single ply roofing systems, through a quality assured partnership. By specifying products and specialist installation by SPRA Manufacturer, Associate and Contractor members you can be assured that all parties meet strict quality criteria. Compliance with these criteria and with the Code of Conduct is assessed at application, by annual audit and by random spot checks.

## Expertise

With over **30 years of experience**, development and **Made in Germany 'know-how'**, we understand the requirements for a fastener and its application on building envelopes. Our knowledge provides the base and source of our products and EJOT's solutions offer our customers real benefits.

## Quality and efficient assembly

The quality of our products **surpasses planning laws and legal requirements**. Our aim is to ensure quick and easy assembly.

## Customer-friendly service

We make a point of building trusting and friendly relationships with our customers. Our advisers offer **24-hour customer service** with technical back-up on site when required. In addition, EJOT offers 'know-how' through **training seminars**.

## Global availability

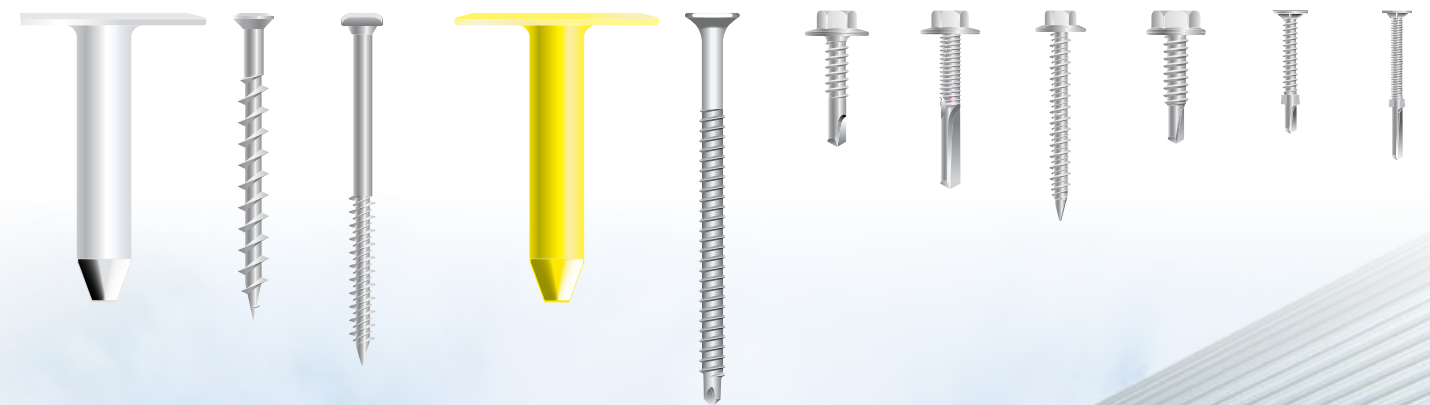
EJOT's UK manufacturing and supply base is complemented with EJOT's **Europe-wide sales and service network** as well as a worldwide project support team **always ready to help our customers at any time**, nationally and internationally.

## The proven method all done with one type of combination



- Secure mechanical fixing of single ply membrane and insulation onto steel, timber or concrete decks
- Polyamid / polyethylene construction for longevity
- Insulation thickness from 40 to 400 mm
- Minimal cold bridging
- Prevents fastener head protrusion due to foot traffic
- Resistant to unwinding
- The security of known performance figures
- Cost efficiency

# Flat Roofing Made Simple



“Simplicity is supreme excellence”

James Watt



# Dual Purpose Combinations

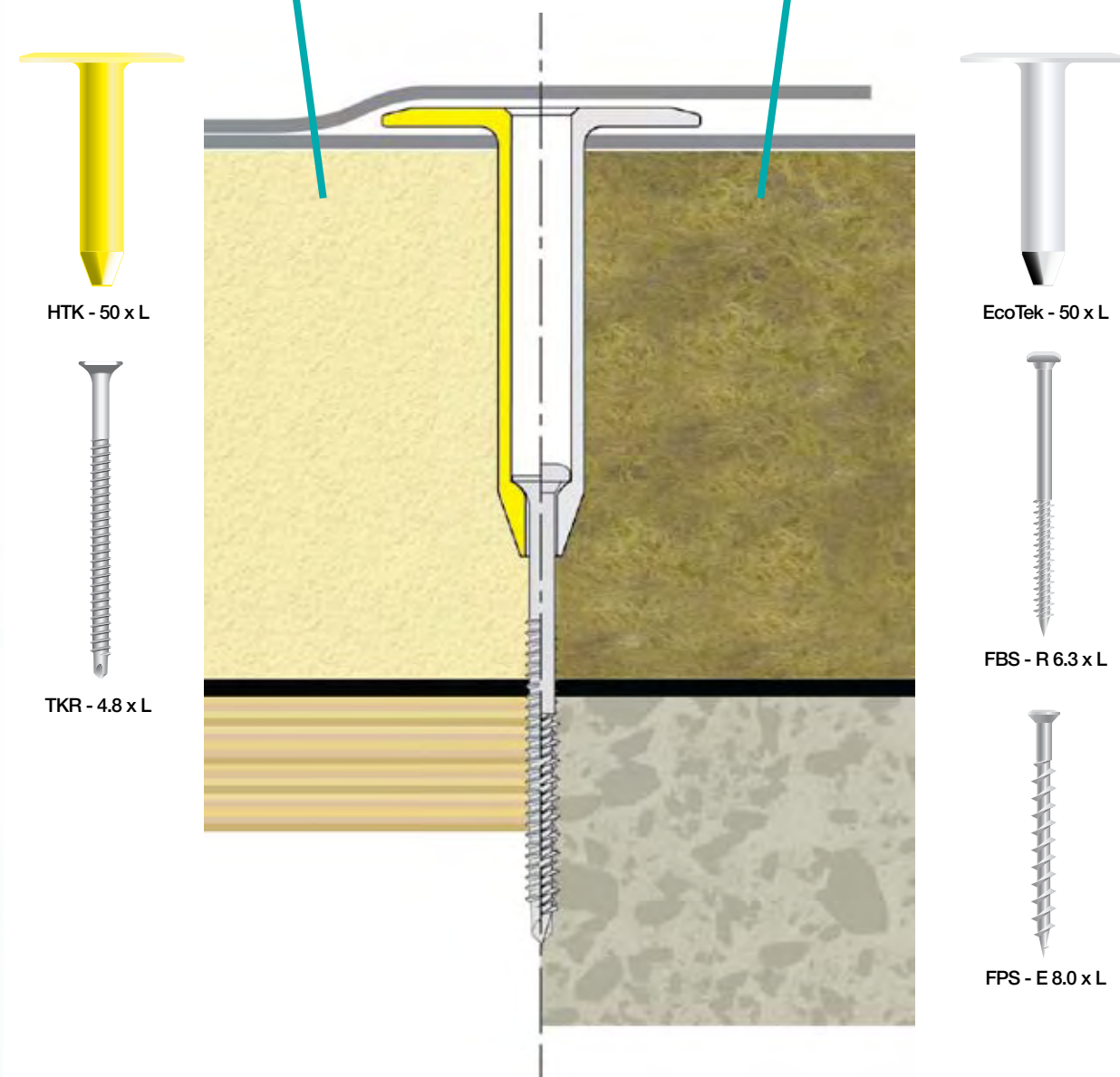
**Fix both insulation and membrane via insulation, using just one type of fastener/tube combination.**

## Steel or plywood deck with insulation

Installation with insulation back to steel or plywood deck using the HTK/TKR combination.

## Concrete with insulation

Installation with insulation back to concrete or aerated concrete using EcoTek.

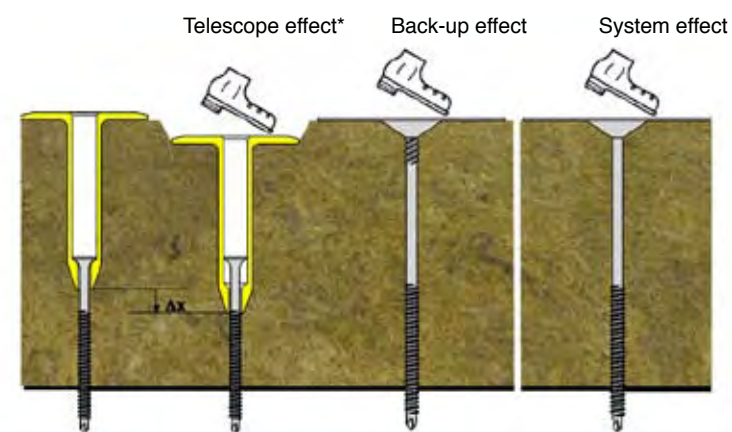


## Features & Benefits

- Secure mechanical fixing of single ply membrane and insulation to steel or timber decks
- Polyamid construction for longevity
- Insulation thickness from 40 to 400 mm
- Minimal cold bridging
- Prevents fastener head protrusion due to foot traffic
- Resistant to unwinding
- Steel and plywood applications available as a fully automated system
- Economical installation and easy application with the EJOT ECOset HTK automated tooling
- The security of known performance figures
- Cost efficient fastener and washer tube combinations
- System versatility through screw and washer combinations
- Stainless steel solutions available
- A range of accessories to aid installation

When using a non-compressible insulation please contact our technical department to find out what washer and screw combination you require for your application

## Protection from foot traffic



\* Prevents screw head protrusion due to foot traffic.

## The advantages of mechanical fixing over bonded or ballasted

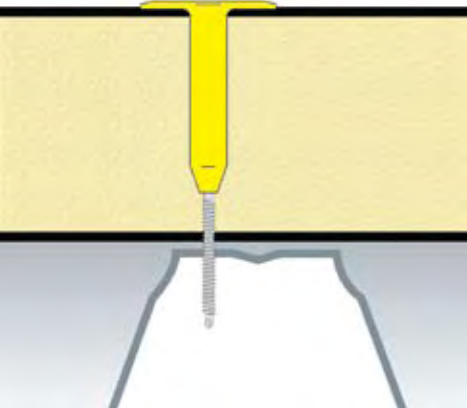
- **Adjustable**  
the number of fasteners can be adjusted to the wind loads
- **Inspection**  
the number of fasteners can always be checked after installation
- **Safe to fire**  
no hot bitumen is required on the roof; installation without torch
- **Labour friendly**  
no solvents required, automatic equipment available for easy and ergonomically installation
- **Independent from weather conditions**  
the mechanical fasteners can be installed even in a humid and rainy climate conditions. This is not the case for the roofing membrane.
- Mechanical fasteners shall not be used on buildings with high humidity content or buildings enclosing processes generating high contents of moisture.
- Some mechanical fastening systems are cold bridges. This can be prevented by using plastic tube systems.

Steel plywood deck with insulation

Installation with insulation back to steel or plywood deck using the HTK/TKR combination

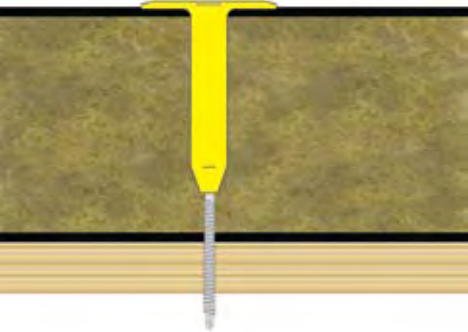
Back to steel deck 0.7-1.2mm

- Thermal bridge
- Protection from foot traffic



Back to plywood deck

- Thermal bridge
- Protection from foot traffic



- The most popular HTK/TKR fasteners are also available in the stainless steel TKE range.

Steel deck applications

Ø x L mm	HTK Length mm	TKR Length mm	Insulation Thickness mm	Drive Bit mm	Min Qty
60 - 35/50	35	50	60	P2 50mm	100
70 - 35/60	35	60	70	P2 50mm	100
80 - 55/50	55	50	80	P2 100mm	100
90 - 55/60	55	60	90	P2 100mm	100
100 - 55/70	55	70	100	P2 100mm	100
110 - 55/80	55	80	110	P2 100mm	100
120 - 95/50	95	50	120	P2 150mm	100
130 - 95/60	95	60	130	P2 150mm	100
140 - 95/70	95	70	140	P2 150mm	100
150 - 95/80	95	80	150	P2 150mm	100
160 - 95/90	95	90	160	P2 150mm	100
170 - 145/50	145	50	170	P2 200mm	100
180 - 145/60	145	60	180	P2 200mm	100
190 - 145/70	145	70	190	P2 200mm	100
200 - 145/80	145	80	200	P2 200mm	100
210 - 145/90	145	90	210	P2 200mm	100
220 - 145/100	145	100	220	P2 200mm	100
230 - 145/110	145	110	230	P2 200mm	100
240 - 145/120	145	120	240	P2 200mm	100
250 - 145/130	145	130	250	P2 200mm	100
260 - 145/140	145	140	260	P2 200mm	100

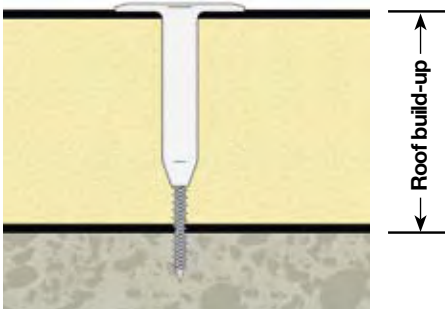
Plywood deck applications

Ø x L mm	HTK Length mm	TKR Length mm	Insulation Thickness mm	Drive Bit mm	Min Qty
60 - 35/70	35	70	60	P2 100mm	100
70 - 35/80	35	80	70	P2 100mm	100
80 - 55/70	55	70	80	P2 100mm	100
90 - 55/80	55	80	90	P2 100mm	100
100 - 55/90	55	90	100	P2 100mm	100
110 - 55/100	55	100	110	P2 100mm	100
120 - 95/70	95	70	120	P2 150mm	100
130 - 95/80	95	80	130	P2 150mm	100
140 - 95/90	95	90	140	P2 150mm	100
150 - 95/100	95	100	150	P2 150mm	100
160 - 95/110	95	110	160	P2 150mm	100
170 - 145/70	145	70	170	P2 200mm	100
180 - 145/80	145	80	180	P2 200mm	100
190 - 145/90	145	90	190	P2 200mm	100
200 - 145/100	145	100	200	P2 200mm	100
210 - 145/110	145	110	210	P2 200mm	100
220 - 145/120	145	120	220	P2 200mm	100
230 - 145/130	145	130	230	P2 200mm	100
240 - 145/140	145	140	240	P2 200mm	100
250 - 145/150	145	150	250	P2 200mm	100

Concrete with insulation

Installation with insulation back to concrete or aerated concrete using EcoTek

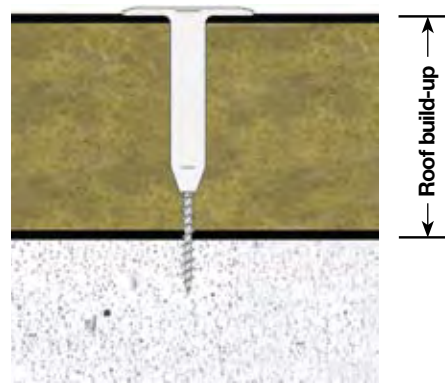
EcoTek with FBS-R concrete screw



Minimum Embedment 30mm  
Drill depth 45mm

Roof Build-up max. ≤	EcoTek 50 x L				
	35	65	105	165	225
FBS - R - 6.3 x L	35	50	90	150	210
	60	50	80	120	180
	70	60	90	130	190
	80	70	100	140	200
	100	90	120	160	220
	120	110	140	180	240
	140	130	160	200	260
	180	170	200	240	300
	220	210	240	280	340

EcoTek with FPS-E aerated concrete screw



Minimum Embedment 60mm

Roof Build-up max. ≤	EcoTek 50 x L				
	35	65	105	165	225
FPS - E - 8.0 x L	100	60	90	130	190
	120	80	110	150	210
	160	120	150	190	250
	200	160	190	230	290
	240	200	230	270	330

Fastener combination: Refer to table  
Minimum embedment: 30mm  
Hole depth: 45mm  
Hole diameter: 5.0mm  
Anchor system: EcoTek and FBS-R

Deck: Concrete  
Vapour barrier: PE membrane  
Insulation: Mineral wool  
Membrane: PVC

Features of the EcoTek combination

- Secure mechanical fixing of single ply membrane and insulation onto steel, timber or concrete decks
- Polyamid / polyethylene construction for longevity
- Insulation thickness from 40 to 400 mm
- Minimal cold bridging
- Prevents fastener head protrusion due to foot traffic
- Resistant to unwinding
- Versatile washer tube can be combined with TKR, TKE and FPS-E and FBS-R fasteners
- The security of known performance figures
- Cost efficient fastener and washer tube combinations

Fastener combination: Refer to table  
Minimum embedment: 60mm  
Anchor system: EcoTek and FPS-E  
Deck: Aerated concrete  
Vapour barrier: PE membrane  
Insulation: Mineral wool  
Membrane: PVC



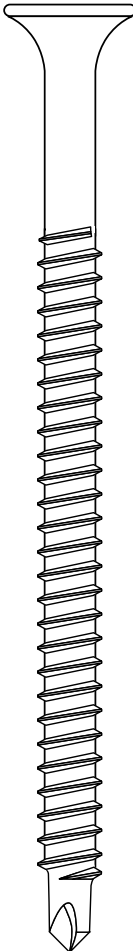
# Applications

## EJOT Climadur-Dabo® Fastener

Carbon steel with organic corrosion resistant finish.

TKR

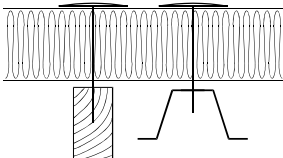
P2



**Application**

To be used in combination with a HTK - 50 tube washer to secure insulation and membrane through insulation back to steel decks 0.7mm - 1.2mm and plywood decks.

Used to secure perimeter metals back through insulation to steel decks 0.7mm - 1.2mm and plywood decks.



- TKR range to be used in conjunction with a HTV 82/40 TK washer when securing a non-compressable insulation back to substrates mentioned above.
- TKR 4.8 x 35 version used to fix a single layer waterproof membrane via a fleece direct to timber deck, to be used in conjunction with stress plate HTV 82/40F
- The TKE range is also available, similar to TKR but in stainless steel

N.B. Fastener is fully threaded up to and including the TKR 50 only.

Ø x L mm	Deck Type		Min Qty
	Steel Deck Min Insulation Max	Timber Min Insulation Max	
4.8 x 35	5 - 15	N/A	100
4.8 x 50	5 - 30	5 - 10	100
4.8 x 60	15 - 40	10 - 20	100
4.8 x 70	25 - 50	20 - 30	100
4.8 x 80	35 - 60	30 - 40	100
4.8 x 90	45 - 70	40 - 50	100
4.8 x 100	55 - 80	50 - 60	100
4.8 x 110	65 - 90	60 - 70	100
4.8 x 120	75 - 100	70 - 80	100
4.8 x 130	85 - 110	80 - 90	100
4.8 x 140	95 - 120	90 - 100	100
4.8 x 150	105 - 130	100 - 110	100
4.8 x 160	115 - 140	110 - 120	100
4.8 x 170	125 - 150	130 - 140	100
4.8 x 180	135 - 160	150 - 160	100
4.8 x 200	155 - 180	170 - 180	100
4.8 x 220	175 - 200	190 - 200	100
4.8 x 240	195 - 220	210 - 220	100
4.8 x 260	215 - 240	230 - 240	100
4.8 x 280	235 - 260	230 - 240	100
4.8 x 300	255 - 280	250 - 260	100

### Single skin steel deck 0.7 - 1.2mm

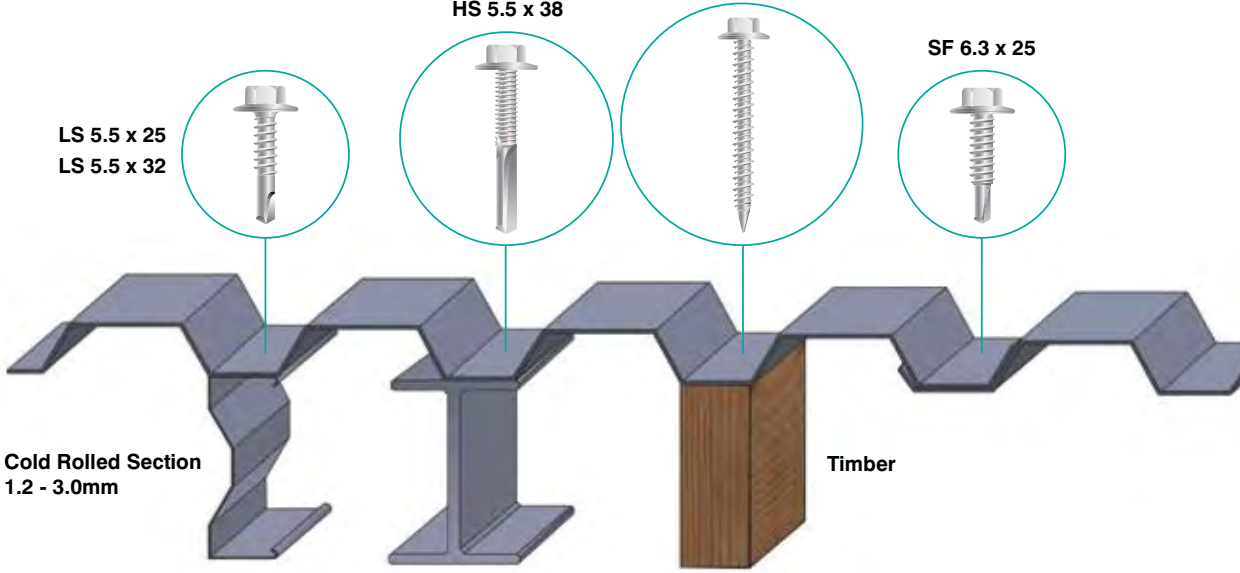
All fasteners can be supplied with or without a washer.

LS 5.5 x 25  
LS 5.5 x 32

HS 5.5 x 38

TS 6.3 x 45  
TS 6.3 x 60

SF 6.3 x 25



Cold Rolled Section 1.2 - 3.0mm

Hot Rolled Section 4.0 - 12mm

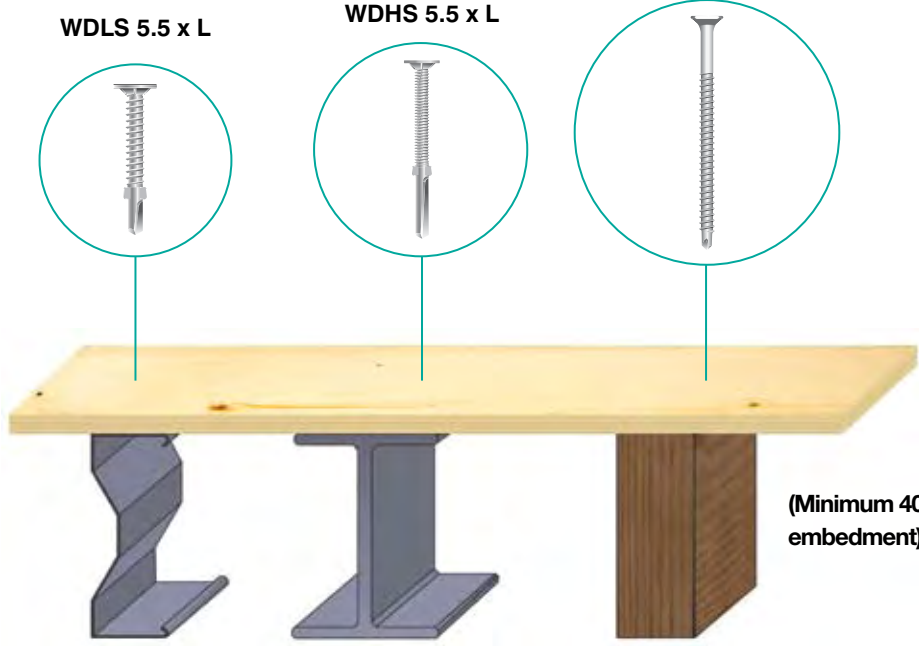
Timber

### Plywood and OSB Deck

WDLS 5.5 x L

WDHS 5.5 x L

TKR 4.8 x L



Cold Rolled Section 1.5 - 3.0mm

Hot Rolled Section 4.0 - 12mm

Timber (Minimum 40mm embedment)

EJOT Dabo® Fastener

A2 Grade austenitic stainless steel.

S/SS M5



Application

Single layer waterproof membrane via a fleece direct  
- Timber deck  
For use with stress plate HTV 82/40F



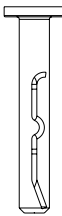
Ø x L mm	Unwashed			Min Qty
5.0 x 35				100

Order Example: S/SS M5 x 35

EJOT Anchor

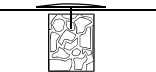
Polyamide expansion anchor with stainless steel, spiralform nail (hammer-set)

ND-K



Application

Membrane via a fleece direct  
- Concrete  
For use with stress plate HTV 82/40F



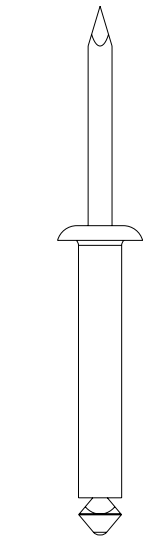
Ø x L mm	Insulation		Min Qty
	Pilot Hole mm	Embedment mm	
6.0 x 50E	6.0	25 - 45	100

Order Example: ND-K-6.0 x 50E

EJOT Peel Rivets

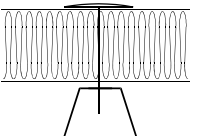
Aluminium body with steel mandrel.

PR



Application

Insulation and single layer waterproof membrane  
- Woodwool, aluminium, thin timber and perforated steel decks  
The PR range can be used with the HTV 82/40 - 7 steel stress plate and HTV 70RU  
\* Below 19 mm build-up the mandrel stub may protrude above the rivet head and may need to be cropped.  
PR rivets are suitable for use in 50 mm minimum thickness woodwool decking. Deduct 6 mm from maximum ECT. Protrusion must be a minimum 38 mm.  
A site test is recommended in all woodwool applications.



Ø x L mm	Insulation			Min Qty
	Pilot Hole mm	Profusion* mm	ECT Min Max	
6.5 x 38	7	32	0.1 - 6.0	100
6.5 x 50	7	32	0.1 - 8.0	100
6.5 x 75	7	32	5.0 - 43.0	100
6.5 x 100	7	32	30.0 - 68.0	100
6.5 x 125	7	32	55.0 - 93.0	100
6.5 x 150	7	32	80.0 - 118.0	100
6.5 x 175	7	32	105.0 - 143.0	100
6.5 x 200	7	32	130.0 - 168.0	100
6.5 x 225	7	32	155.0 - 193.0	100
6.0 x 250	7	32	180.0 - 218.0	100

Order Example: PR 6.5 x 38

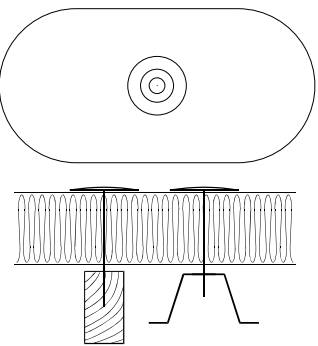
EJOT Stress Plates

Galvanised carbon steel plates for load spreading when fixing membrane

HTV-82/40

Application

Membrane  
- 0.7 - 1.2 mm Steel or Timber Deck  
Typical fasteners:  
SW8R and SW8RT



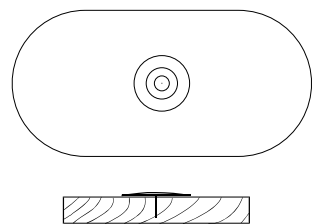
Ø x L mm	Dimensions			Min Qty
	Length mm	Width mm	Hole Size mm	
82/40	82.0	40.0	5.0	100

Order Example: HTV-82/40

HTV-82/40TK

Application

Membrane laid on rigid insulants that cannot accept a deep recess  
- 0.7 - 1.2 mm steel or timber deck.  
Typical fasteners: TKR



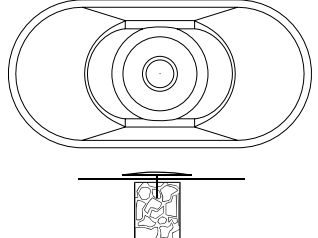
Ø x L mm	Dimensions			Min Qty
	Length mm	Width mm	Hole Size mm	
82/40TK	82.0	40.0	5.0	100

Order Example: HTV-82/40TK

HTV-82/40F

Application

Membrane via a fleece direct  
- Timber and Concrete  
Typical fasteners:  
SHR  
ND-K-6.0 x 50 EF



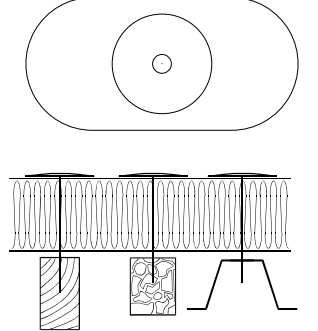
Ø x L mm	Dimensions			Min Qty
	Length mm	Width mm	Hole Size mm	
82/40 F	82.0	40.0	5.0	100

Order Example: HTV-82/40F

HTV-82/40-7

Application

Membrane  
- Various substrates depending on fastener  
Typical fasteners:  
GIF and PR rivet



Ø x L mm	Dimensions			Min Qty
	Length mm	Width mm	Hole Size mm	
82/40-7	82.0	40.0	7.0	100

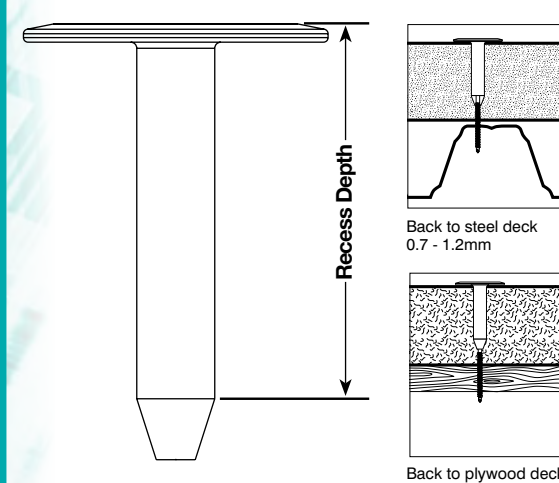
Order Example: HTV-82/40-7



### EJOT Plastic Tube Washer

Polyamide plastic tube washer

#### HTK-50 x 15



Recess Depth

Back to steel deck  
0.7 - 1.2mm

Back to plywood deck

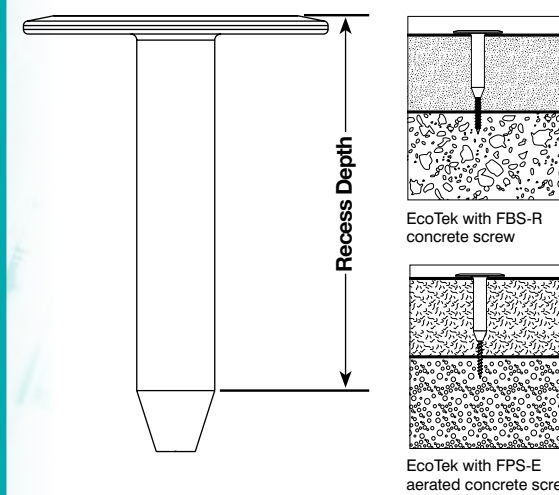
Ø x L mm	Dimensions			Min Qty
	Washer mm	Recess Depth mm	Overall Depth mm	
50 x 15	50	15	25	100
50 x 35	50	35	45	100
50 x 55	50	55	65	100
50 x 95	50	95	105	100
50 x 145	50	145	155	100
50 x 185	50	185	195	100

Order Example: HTK-50 x 15

#### Application

Insulation and single layer waterproof membrane  
- 0.7 - 1.2 mm steel or timber deck.  
Typical fasteners: TKR and TKE  
Available assembled and collated

### EcoTek



Recess Depth

EcoTek with FBS-R  
concrete screw

EcoTek with FPS-E  
aerated concrete screw

Ø x L mm	Dimensions			Min Qty
	Washer mm	Recess Depth mm	Overall Depth mm	
50 x 35	50	25	35	100
50 x 65	50	55	65	100
50 x 105	50	95	105	100
50 x 165	50	155	165	100
50 x 225	50	215	225	100

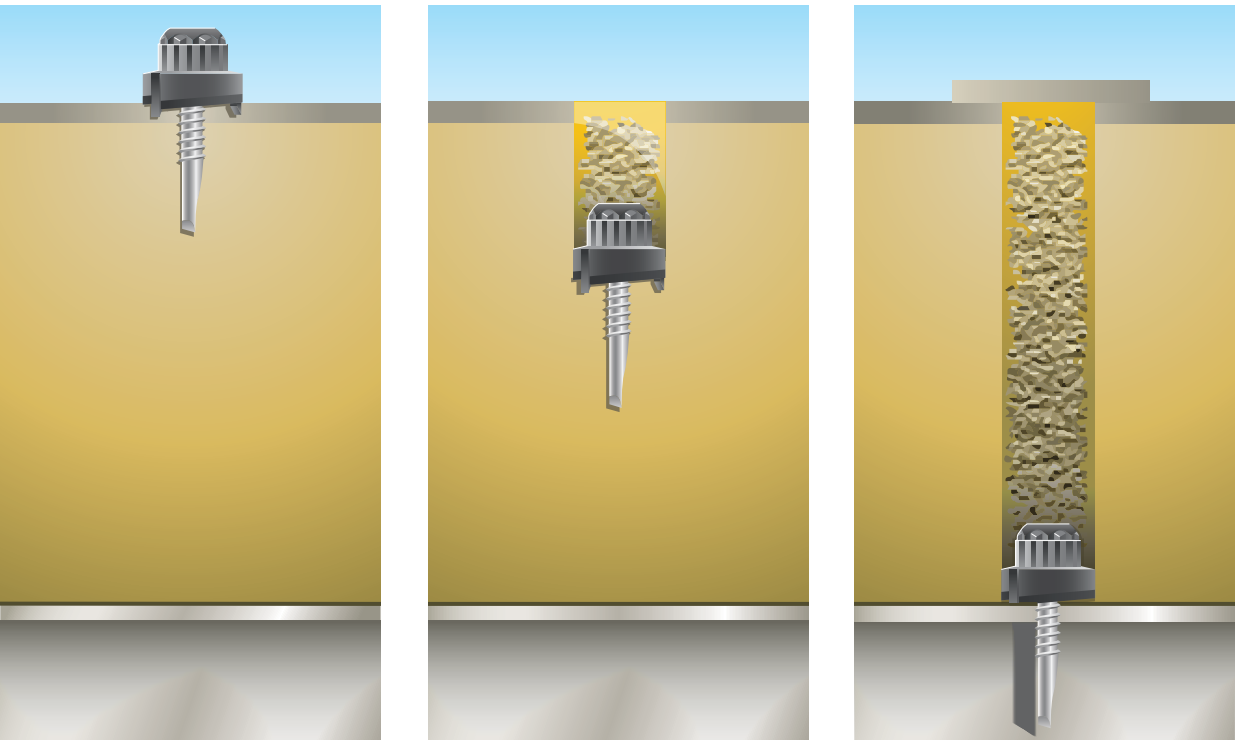
Order Example: EcoTek-50 x 35

#### Application

Insulation and single layer waterproof membrane  
- Concrete or aerated concrete  
Typical fasteners: FBS - R and FPS - E  
Available assembled and collated

## EJOT® Opticore

EJOT's innovative self-coring and drilling fasteners...



...for cold rolled steel, hot rolled steel and timber with stitchers also available

Opticore is a patented dual-drive fastening system that enables rapid self-coring through insulation, drilling through and fastening to the substrate in one operation.

Opticore fasteners have high strength moulded nylon cutting heads with dual drive system, using 11mm Bi-Hex and Torx 30 Plus, with high grade carbon steel tips casehardened to Din standard 7504.



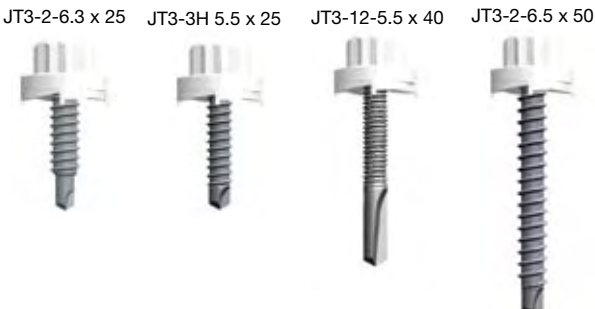
### Opticore Carbon Steel

Corrosion resistance finish in 'Climadur' organic coat.



### Opticore Stainless Steel

High quality stainless steel fastener, grade 304 St/St, ISO group A2, Din Werkstoff 1.4301.





# EJOT®

## Applitec Centre

The unique UK facility



**The competitive market and changing demands require a fast response to maintain this quality and to meet UK and European standards - before they are even issued.**

EJOT's Applitec Centre is the most comprehensive fastener testing facility in the UK. We undertake testing for all aspects of fastener technology, from simple dimensional and 3-dimensional analysis to testing the mechanical, structural and material dynamics of both the product alone and within its application.

The Applitec Centre provides quality control, application testing, material testing, wind load calculations, confirmation of performance and product design resources.

### Specifications, Building Regulations and International Standards

- The EJOT Group has a policy that only products of high quality shall be associated with the brand name EJOT.
- EJOT is working according the quality assurance system ISO 9001
- Screw manufacturing and injection moulding plants are certified in accordance with VDA 6, part 1 of the automotive industry.
- Insured up to a limit of £15,000,000 in respect of our legal responsibility for either damage to other products, property or injury. As a result of failure of one EJOT's products for which it is responsible for.
- ETA-07/0013



## Services

**From wind calculations to installation tool hire, EJOT's products are backed with extensive customer services.**

Huge stocks are held close to the motorway network in large warehousing and efficient distribution network here in the UK, with other facilities including the Applitec Centre, training, technical and site support.

### Installation tool loan service

For quick, accurate and efficient installation, EJOT can provide special installation tools. This equipment is specifically designed for the task:

- Reduction of installation time and site costs
- Stand-up installation reducing installer fatigue
- Depth control for correct application
- One tool for all insulation thicknesses
- Prevention of overdriving
  - compression of the membrane
- Prevention of fastener stripping
- Fast and easy installation

