



TECTUS ENERGY 3D Adjustable Concealed Hinge 200 x 32mm 120KG – SW175 Bronze Finish Light

Variant code: TE540.3D.EGY.SW175

The **TECTUS ENERGY 3D Adjustable Concealed Hinge** is a high-performance hinge system combining a **completely concealed design** with **permanent energy transfer** for sophisticated architectural door installations. Designed for **unrebated heavy-duty doors**, the hinge remains hidden when the door is closed, helping create clean, uninterrupted door and frame lines.

With a manufacturer-specified **120kg load capacity**, the hinge measures **200 x 32mm** and is suitable for **timber, steel and aluminium frames**. Comfortable **3D adjustment** provides $\pm 3\text{mm}$ sideways, $\pm 3\text{mm}$ height and $\pm 1\text{mm}$ compression adjustment, enabling precise door alignment after installation. **Maintenance-free slide bearings** support dependable operation in demanding door applications.

The integrated **permanent energy transfer** provides a concealed route for compatible electrically operated door components, with individual connection adapter options available to suit different requirements. Offered in **various finishes**, including the sophisticated **Bronze Finish Light**, the hinge combines concealed aesthetics, substantial load-bearing capability and integrated electrical functionality for premium door projects.

Product Features

- **Completely concealed hinge system** for clean architectural door designs
- Integrated **permanent energy transfer**
- **Individual connection adapter options** available
- Designed for **unrebated heavy-duty doors**
- Suitable for **timber, steel and aluminium frames**
- Manufacturer-specified **120kg load capacity**
- Overall dimensions of **200 x 32mm**
- Comfortable **3D adjustment** for precise



- door alignment
- **Side adjustment:** $\pm 3\text{mm}$
- **Height adjustment:** $\pm 3\text{mm}$
- **Compression adjustment:** $\pm 1\text{mm}$
- Features **maintenance-free slide bearings**
- Opening angle of up to **180°**
- Minimum door thickness of **40mm**
- Available in **various architectural finishes**
- **Bronze Finish Light** available as a finish option

Product Benefits

- **Permanent energy transfer provides an integrated concealed solution for compatible electrically operated door components**
- **120kg load capacity provides substantial support for appropriately specified heavy-duty doors**
- **3D adjustment enables precise side, height and compression correction after installation for accurate door alignment**
- **Completely concealed installation** maintains clean and uninterrupted door and frame lines when closed
- **Maintenance-free slide bearings** help minimise routine hinge maintenance requirements
- Compatibility with **timber, steel and aluminium frames** provides flexibility across different door constructions
- **Various finish options** allow the hinge to coordinate with different architectural and interior design schemes
- **Bronze Finish Light** provides a warm, refined appearance for premium architectural door projects

Technical Characteristics

- **Product Type:** 3D Adjustable Concealed Hinge with Permanent Energy Transfer
- **Load Capacity:** 120kg
- **Load Capacity Basis:** Two Hinges per 1 x 2m Door Leaf
- **Overall Length:** 200mm
- **Door Part Width:** 32mm
- **Frame Part Width:** 32mm
- **Minimum Door Thickness:** 40mm
- **Side Adjustment:** $\pm 3\text{mm}$
- **Height Adjustment:** $\pm 3\text{mm}$
- **Compression Adjustment:** $\pm 1\text{mm}$

- **Opening Angle:** 180°
- **Cutter Diameter:** 24mm
- **Collar Ring Diameter:** 30mm
- **Bearing System:** Maintenance-Free Slide Bearings
- **Energy Transfer:** Permanent
- **Wire Cross Section:** 0.14mm²
- **Number of Wires:** 16
- **Maximum Voltage:** 50V
- **Maximum Current:** 0.8A
- **Frame Compatibility:** Timber, Steel & Aluminium
- **Door Type:** Unrebrated Heavy-Duty Doors
- **Finish:** Available in Various Finishes
- **Certifications / Quality Marks:** CE, IFT, UL & Certifire
- **Classification:** EN 1935 / EAD - 4 7 6 1*1 —*2 1 13
- **Function Range:** Smoke Resistance, Soundproof & Burglar Resistance

Applications

The **TECTUS ENERGY 3D Adjustable Concealed Hinge** is designed for **unrebrated heavy-duty doors** requiring both concealed hinge technology and **permanent energy transfer**. Suitable for **timber, steel and aluminium frames**, it is particularly appropriate for premium residential, commercial and architectural door installations incorporating compatible electronic or electrically powered door components. Its **120kg load capacity, precise 3D adjustment, 180° opening angle and completely concealed construction** make it a high-performance solution for projects requiring clean architectural detailing alongside integrated electrical functionality.

Property	Value
Finish	Bronze Finish Light
Opening angle (°)	180
Load Capacity (kg)	120
Width Door Part (mm)	32
Width Frame Part (mm)	32
Cutter diameter (mm)	24
Collar ring diameter (mm)	30



Property	Value
Min Door Thickness (mm)	40
Overall Length (mm)	200
Certification	CE, IFT, UL & Certifire
Wire Cross Section	0.14 mm ²
Max. Voltage (V)	50
No. of Wires	16
Max. Current (A)	0.8