



Halfen Detan-S Carbon Steel Rod System

Building Product Information Sheet (Class 2)

The Halfen DETAN-S Carbon Steel Rod System is a prefabricated tension rod system of different system sizes (steel diameter sizes M10 to M76) used as a kit. The system consists of carbon steel bars (tension rods) with external threads which are connected to each other and to the corresponding structure by special connecting devices. The tension rods are connected to the corresponding structure by steel or steel cast fork end connectors or steel spades eye loops and internal thread. The fork end connectors and spades are connected by double shear steel pin connections to corresponding steel gusset plates or anchor discs. The tension rods are connected to each other by steel threaded sleeves (couplers, couplers with hangers and cross couplers) or by a fork end combination with a spade. The system comprises tension rods, forks, anchor discs, threaded sleeves, pins and (user-supplied) gusset plates.

The DETAN-S system is manufactured with either a mill or hot-dip galvanised finish and intended for the use in structures with static or quasi-static loads. The intended use comprises for instance the suspension of roof structures or vertical glazings, bracings and truss structures.

DETAN-S systems are manufactured in order to the dimensional (system length and size) and optional requirements (e.g. coupler type, mill or galvanised finish) of the client. Gusset plates are prepared by the client following the guidelines presented in the technical documentation and the designer.

Supporting documentation

- Full product details, including design and installation guidelines, are available in supporting technical documentation. See: Halfen Detan Rod Systems.
Available from: <https://www.ancon.co.nz/downloads/technical-literature>

Product Line

- DETAN-S

Relevant Building Code clauses:

- Clause B1 Structure - B1.3.1, B1.3.2, B1.3.3, B1.3.4
- Clause B2 Durability - B2.3.1
- Clause F2 Hazardous Building Materials - F2.3.1

Contributions to Compliance:

Clause B1 Structure

- DETAN-S are CE marked and product compliant with European standards. System capacities are detailed in Halfen Tension Rod System DETAN-S European Technical Assessment ETA-05/0207, available from: <https://www.ancon.co.uk/downloads/resources/approvals>

Clause B2 Durability

- B2.3.1.** DETAN-S is assumed in ETA-05/0207 to provide a working life of at least 25 years. This working life assumption cannot be interpreted as a guarantee. The durability of DETAN-S systems will be subject to placement in accordance with the design and required durability assessment and consideration of a Chartered Professional Engineer working to the appropriate design and environmental standards.

Clause F2 Hazardous Building Materials

- DETAN-S meets the performance requirements under Clause F2.3.1.

Manufacturer and Importer Details:

Place of Manufacture:	Overseas
Manufacturer:	Leviat GmbH, Liebigstrasse 14, 40764 Langenfeld, Germany
Manufacturer Email:	info.de@leviat.com
Importer Name:	Leviat New Zealand Limited
Importer Address:	246D James Fletcher Drive, Otahuhu, Auckland, 2024
Importer Website:	www.leviat.com/en-nz
Importer Email:	info.nz@leviat.com
Importer Phone:	+64 9 276 2236
Importer NZBN:	9429031339056

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Limitations on use:

- DETAN-S is intended for the use in structures with static or quasi-static loads according with EN 1990:2002, where no verification of fatigue relating to EN 1993-1-9:2005 is necessary.
- Use of DETAN-S in exterior or damp environments is the responsibility of the designer. Guidelines helpful to the preparation of the durability assessments necessary to the use and maintenance of DETAN-S in environments subject to different conditions are presented in the supporting technical documentation and AS/NZS2312.

Design requirements to support appropriate use:

- DETAN-S shall be used subject to the specific engineering design of a Chartered Professional Engineer in accordance with the requirements of NZS3404 and European Technical Assessment ETA-23/0207. Design guidelines and order forms are available in the supporting technical documentation.

Installation requirements:

- DETAN-S shall be installed by a competent contractor in accordance with Leviat installation instructions and the specific engineering design and guidance of the designer.
- Installation guidelines are available in the supporting technical documentation.

Maintenance requirements:

- Maintenance of DETAN-S shall be in accordance with the design and maintenance schedule prepared by the designer.

Warning or ban:

- This product is not subject to any warning or ban under section 26 of the Building Act 2004.