



Lindapter Type AF and Type AAF

Building Product Information Sheet

Lindapter Type AF and Type AAF are high slip resistance girder clamps used to clamp together steel components. They are used where high load capacities are present in either tensile, frictional or combined load directions.

Type AF clamps comprise a single piece design in sizes to suit M12, M16, M20 and M24 (user-supplied) bolts. Two tail length options (short 'S' and medium 'M') accommodate different steel thicknesses. Ancillary packing pieces (AFW, AFCW, AFP) are used to increase the clamping range. Products are identified by reference to clamp type, size and tail length (e.g. AF12S).

Type AAF clamps comprise a two-part design that incorporates a rocking washer to allow the clamp to self-adjust to suit flange thicknesses 6mm to 40mm. Ancillary packing pieces (AAFP) are used to further increase the clamping range. Type AAF are available in sizes to suit M12, M16 and M20 (user-supplied) bolts, and identified by reference to type and size (e.g. AAF12).

Type AF and Type AAF durability is achieved by a hot dip galvanised coating and categorised by Corrosivity Class in accordance with ISO9223.

Composition

- Type AF and Type AAF clamps are cast from spheroidal graphite iron.

Supporting documentation

- Full product details, including installation guidelines, are presented in supporting technical documentation. See: Lindapter Weld-Free Steel Connectors.
- Available from: <https://www.ancon.co.nz/downloads/technical-literature>

Product Identifier

- AF_ _ _ , AAF_ _

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 (a)
- Clause F2 Hazardous Building Materials — F2.3.1

Contributions to Compliance:

Clause B1 Structure

- B1.3.1, B1.3.2, B1.3.3, B1.3.4.** Type AF and Type AAF clamps are CE marked and product compliant with European standards.
- Type AF and Type AAF assemblies have been evaluated by the ICC Evaluation Service (ICC-ES Evaluation Report ESR-3976) for compliance to the International Building Code (IBC) and for use in resisting wind loads, and seismic loads in seismic design categories A through F. The load and resistance factor (LRFD) design strengths meet the requirements of American standards AISC 360, AISC 341 and ASCE/SEI 7, and are suitable for use when designing to NZS 3404. Design strengths applicable to NZS3404 are presented in supporting technical documentation.

Manufacturer and Importer Details:

Place of Manufacture:	Overseas
Manufacturer:	Lindapter International, Brackenbeck Road, Bradford West Yorkshire BD7 2NF, United Kingdom
Manufacturer Email:	support@lindapter.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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- Refer to: ICC-ES Evaluation Report ESR-3976. Available from: <https://icc-es.org>
- Refer to: ICC-ES Approved Metric Conversion Datasheet (New Zealand Edition). Available from: <https://www.ancon.co.nz/products/lindapter-weld-free-steel-connectors/product-range/steelwork-and-rail-fixing>

Clause B2 Durability

- B2.3.1 (a).** Type AF and Type AAF will meet the provisions of B2.3.1(a) of not less than 50 years subject to placement, use and maintenance in accordance with the design and required durability assessment and consideration of the responsible engineer working to the appropriate design and environmental standards.

Clause F2 Hazardous Building Materials

- F2.3.1.** Type AF and Type AAF clamps meet the performance requirements under Clause F2.3.1.

Limitations on the use of the building product:

- Use of coated steel clamps in exterior or damp environments is the responsibility of the designer. Guidelines helpful to the preparation of the durability assessment necessary to the use of clamps in environments subject to different conditions are presented in the supporting technical documentation (see page 72), which includes durability ratings categorised in accordance with ISO 9223.
- ICC-ES Evaluation report ESR3976 stipulates Type AF and Type AAF clamp assemblies may be used in IBC seismic design categories A through F, but must not be part of the lateral-force resisting system for the primary structure, designated in ASCE 7-16 Table 12.2-1.

Design requirements to support appropriate use:

- The design strength of Type AF and Type AAF connections must be determined by a suitably qualified engineer working in accordance with NZS 3404 and ICC-ES Evaluation Report ESR-3976.

Installation requirements:

- Type AF and Type AAF clamps shall be installed by a competent contractor in accordance with Lindapter 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 Type AF and Type AAF shall be in accordance with the design and durability assessment of the designer. Maintenance of Type AF and Type AAF clamps installed in interior, dry and protected environments will not normally be required during the expected life of the clamp.

Warnings or ban:

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