

EN 581-1:2017
Outdoor furniture - Seating and tables for camping, domestic and contract use
Part 1: General safety requirements

5 Safety requirements

5.1 General PASS

In order to avoid physical injury when the product is in its intended position of use, all edges and corners shall be rounded, chamfered or otherwise protected. This applies to:

- Seating: Edges of the seat, back rest and arm rests and any part of the bottom surface of the seat at a distance less than 120 mm from any edge, where a finger can commonly access*
- Tables: Table tops, any part of the underside of the top surface at a distance less than 500 mm from any edge below the table, where a knee and/or an arm can commonly access.*

*All other parts shall be free from burrs, sharp edges and sharp points.
Movable and adjustable parts shall be designed so that injuries and inadvertent operation are avoided.
It shall not be possible for any load bearing part of the furniture to come loose unintentionally.
All parts which are lubricated to assist sliding shall be designed to protect users from lubricant stains when in normal use.*

5.2 Tubular components PASS

*There shall be no accessible holes in the ends of tubular components with a diameter between 7 mm to 12 mm and with a depth more or equal to 10 mm.
The bottom of tubular legs in contact with the floor shall be closed or capped, however, holes in them are allowed as long as they are not between 7 and 12 mm. These requirements shall be assessed using the test probes.*

5.3 Shear and squeeze points PASS

*5.3.1 Shear and squeeze points when erecting, adjusting and folding away
Unless 5.3.2 or 5.3.3 are applicable, shear and squeeze points that are created only during erecting, adjusting or folding away are acceptable providing the user can be assumed to be in control of his/her movements and to be able to cease applying the force immediately on experiencing pain.*

*5.3.2 Shear and squeeze points under the influence of powered mechanisms
There shall be no accessible shear and squeeze points created by parts of the furniture operated by powered mechanisms, e.g. mechanical springs and gas lifts. This requirement shall be assessed using the test probes.*

*5.3.3 Shear and squeeze points during use
There shall be no accessible shear and squeeze points created by loads applied during normal use.
Shear and squeeze points are not acceptable if there is a risk of injury created by the weight of the user during normal movements and actions, e.g. attempting to move the seating by lifting the seat or by adjusting the backrest.
This requirement shall be assessed using the test probes.
For loungers, the loads applied during normal use are the loads used for the following mechanical tests in Table 1 of EN 581-2:2015
For other seating, the loads applied during normal use are the loads used for the following mechanical tests in Table 2 of EN 581-2:2015:
For tables, the loads applied during normal use are the loads used for the following mechanical tests in Table 1 of EN 581-3:2007*

**EN 581-3 : 2017 Outdoor furniture
Seating and tables for camping, domestic and contract use
Part 3: Mechanical safety requirements for tables**

5 Safety, strength and durability requirements
5.1 General PASS

Before and after the strength, durability and stability tests are carried out, the requirements of EN 581-1:2017 shall be fulfilled.

Glass table tops shall fulfil the requirements in EN 12150-1:2015, Clause 8, fragmentation test, or the mode of breakage (β) according to EN 12600:2002 shall be Type B or Type C.

Holes for parasol in glass table top shall be protected to prevent metal to glass contact.

5.2 Stability, strength and durability PASS

5.2.1 Test sequences and parameters

5.2.1a Vertical static load on main surface PASS

For tables with a table top surface more than 0,25 m² - PASS

Forces :

Height less than or equal to 950 mm : Camping --- Domestic 750N, Contract 1000N

Height greater than 950 mm : Camping --- Domestic 500N, Contract 500N

Cycles : Camping 10, Domestic 10, Contract 10

For tables with a table top surface less than or equal to 0,25 m² - N/A

Forces : Camping 150N, Domestic 300N, Contract 500N

Cycles : Camping 10, Domestic 10, Contract 10

5.2.1b Additional vertical static load test where the main surface has a length > 1600mm PASS

Forces : Camping 500N, Domestic 750N, Contract 1000N

Cycles : Camping 10, Domestic 10, Contract 10

5.2.1c Vertical static load on ancillary surface N.A
5.2.1d Horizontal durability test PASS

Forces : Camping 100N, Domestic 150N, Contract 300N

Cycles : Camping 5000, Domestic 10000, Contract 20000

5.2.1e Stability under vertical load PASS

V1 Forces : Camping 200N, Domestic 200N, Contract 200N

V2 Forces : Camping 200N, Domestic 400N, Contract 400N

5.2.1f Stability for tables with extension elements N.A
5.2.1g Stability of tables designed to support a parasol N.A
5.2.2 Requirements PASS

The safety, strength and durability requirements are fulfilled after testing when:

a) there are no fractures of any member, joint or component,

b) there are no loosening of joints intended to be rigid,

c) the table fulfils its functions after removal of the test loads.

The product shall not overturn when subjected to the stability tests.

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6 Information for use

NOT REQUESTED

Instruction for use shall be provided in the language(s) of the country where the tables are sold.

These instructions shall be headed "IMPORTANT, RETAIN FOR FUTURE REFERENCE: READ CAREFULLY" in letters no less than 5 mm high, unless if the following information is permanently marked on the product.

It shall contain at least the following details:

- a) name and address of the manufacturer/supplier/retailer;*
- b) conditions for use of the product (domestic, camping or contract).*

If applicable:

- c) assembly instructions;*
- d) instructions for the care and maintenance of the table;*
- e) tables which have a hole for a parasol, but which are not intended to support a parasol alone, a warning indicating that a parasol shall always be used with a suitable base.*



Front view



Side view

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END OF REPORT