SLOVENSKI STANDARD
SIST EN 10249-2:1998

01-avgust-1998

Hladno oblikovana obešala iz nelegiranih jekel - 2. del: Mejni odstopki mer in tolerance oblik

Cold formed sheet piling of non alloy steels - Part 2: Tolerances on shape and dimensions

Kaltgeformte Spundbohlen aus unlegierte Stählen - Teil 2: Grenzabmaße und Formtoleranzen

Palplanches profilées a froid en aciers non alliés - Partie 2: Tolérances sur forme et dimensions

Ta slovenski standard je istoveten z: **EN 10249-2:1995**

ICS:

77.140.45	Nelegirana jekla	Non-alloyed steels
77.140.70	Jekleni profili	Steel profiles

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English version

Cold formed sheet piling of non alloy steels - Part 2: Tolerances on shape and dimensions

Palplanches profilées à froid en aciers non alliés - Partie 2: Tolérances sur forme et dimensions

Kaltgeformte Spundbohlen aus unlegierte Stählen - Teil 2: Grenzabmaße und Formtoleranzen

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart,36 B-1050 Brussels

Contents

Foreword

This European Standard was prepared by SC4 "Sheet piling" of Technical Committee ECISS/TC10 "Structural steels - Qualities" the secretariat of which is held by NNI.

EN 10249 is composed of two parts :

Part 1 : Technical delivery conditions,
Part 2 : Tolerances on shape and dimensions.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 1995, and conflicting national standards shall be withdrawn at the latest by December 1995.

According to the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

1 Scope

This part of this European Standard specifies the tolerances on dimensions, squareness of ends, straightness and mass of cold formed non alloy steel sheet piles which are defined in EN 10249-1.

2 Normative references

This European Standard incorporates by dated or undated reference provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 10051 Continously hot-rolled uncoated plate, sheet and strip of non-alloy and alloy steels - Tolerances on dimensions and shape.

EN 10249-1 Cold formed sheet piling of non alloy steels. Part 1 : Technical delivery conditions

3 Control of tolerances - General

3.1 All the measurements are taken outside of the zone deformed by cutting at a distance from the ends of at least 250 mm.

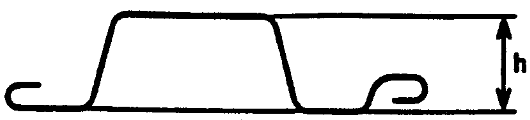
3.2 The dimensions are measured by instruments of appropriate accuracy.

4 Height of profiles

The tolerances on the height of sheet piles are given in table 1.

Table 1 : Tolerances on the height of sheet piles [1)]

Dimensions in millimetres

Designation	Figure	Nominal dimension	Tolerance
Height h		h ≤ 200 200 < h ≤ 300 300 < h ≤ 400 400 < h	± 4 ± 6 ± 8 ± 10

5 Width of profiles

The tolerances on the width of profiles are as follows :

- individual sheet pile : ± 2 % of the nominal width
- pair of interlocked sheet piles : ± 3 % of the nominal width.

1) Applicable to the different shapes of cold formed sheet piles, the figure shows a trench sheet.

6 Wall thickness of profiles

The tolerances on the wall thickness of the profiles shall comply with the requirements of table 2 of EN 10051, for a nominal width of strip and sheet over 1 800 mm.

7 Straightness of profiles

7.1 General

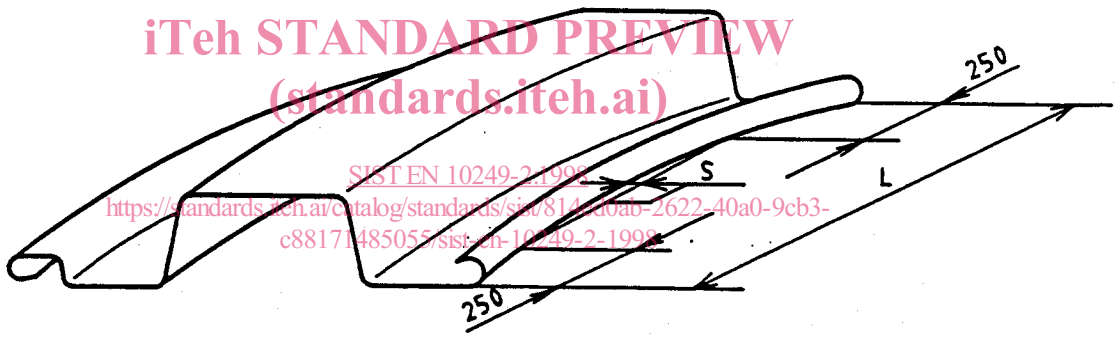
The controls of the profile straightness (measurement of bow-heights corresponding to bending and curving) shall be carried out on a pile which freely lies on a plane surface according to the following figures 1 and 2.

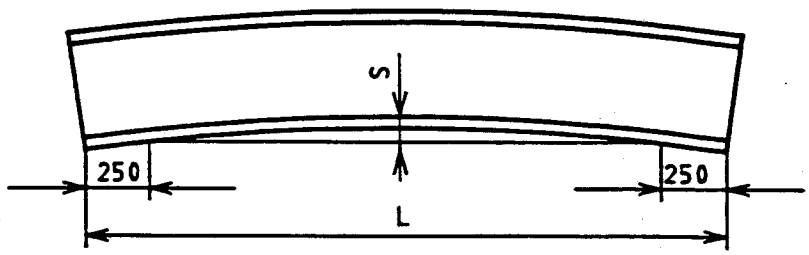
For Z-sheet piles, the controls are carried out on an interlocked pair of sheet piles, and if appropriate, on a welded pair of sheet piles when they are delivered welded.

7.2 Bending

The bow-height S in the horizontal plane of the sheet pile is the distance between the cord and the arc formed by the sheet pile edge (see figure 1).

The bow-height (S) shall be ≤ 0,25 % L.





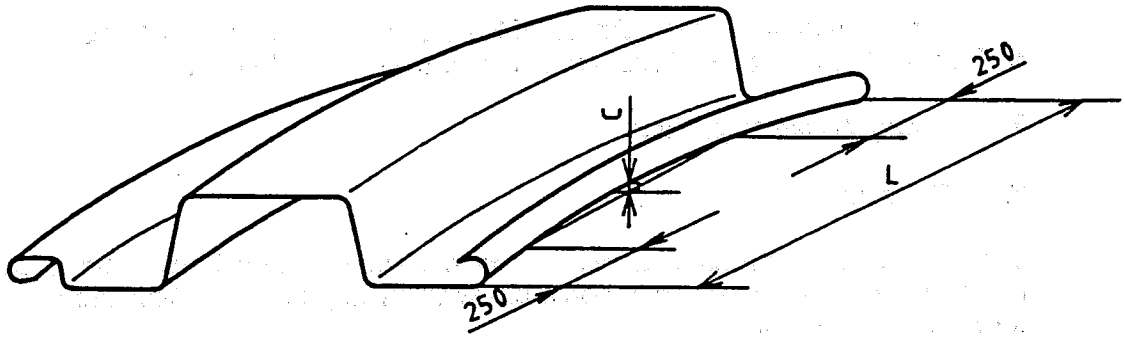
Upper view

Figure 1 : Measurement of bending

7.3 Curving

The bow-height C in the vertical (perpendicular) plane of the sheet pile is the distance between the sheet pile edge in its middle and the reference plane surface (see figure 2).

The bow-height (C) shall be ≤ 0,25 % L.



Lateral view

Figure 2 : Measurement of curving

7.4 Twisting

One sheet pile end being fixed, the dimension (V) which characterizes the twisting is measured at the free end of the sheet pile with regard to the reference plane (see figure 3).

The dimension (V) shall not exceed 2% L with a maximum of 100 mm.

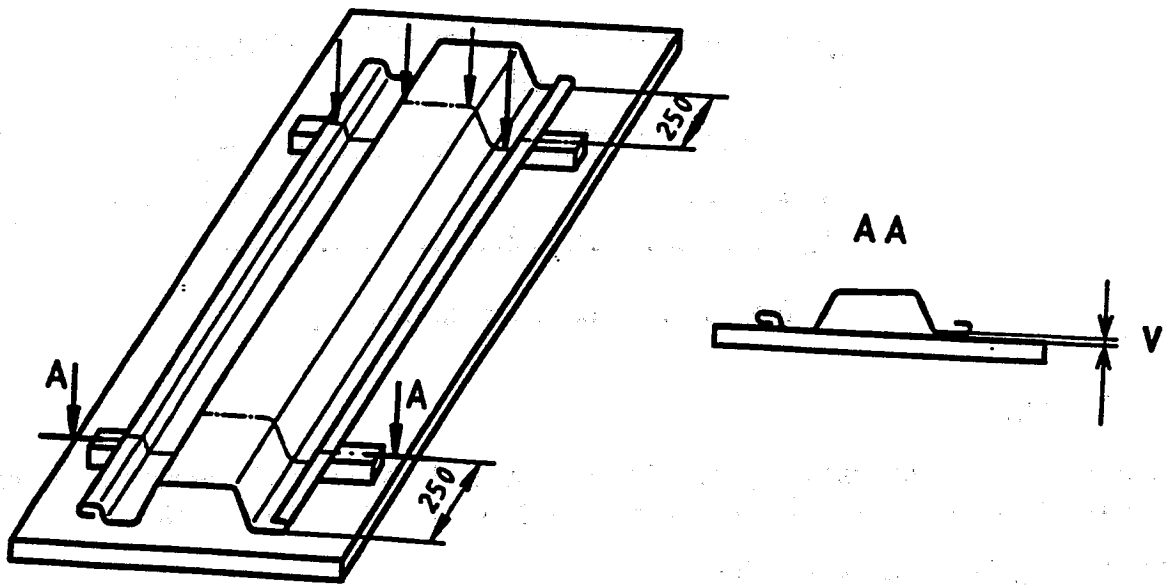


Figure 3 : Measurement of twisting

8 Length

The normal tolerance is ± 50 mm.

A reduced tolerance may be agreed at the time of the enquiry and order.

Option 1, see 13.2.

9 Squareness of ends

The total deviation between the highest and the lowest point of the cutting plane (t) shall not exceed 2 % of the width of the profile, measured perpendicular to the longitudinal axis.

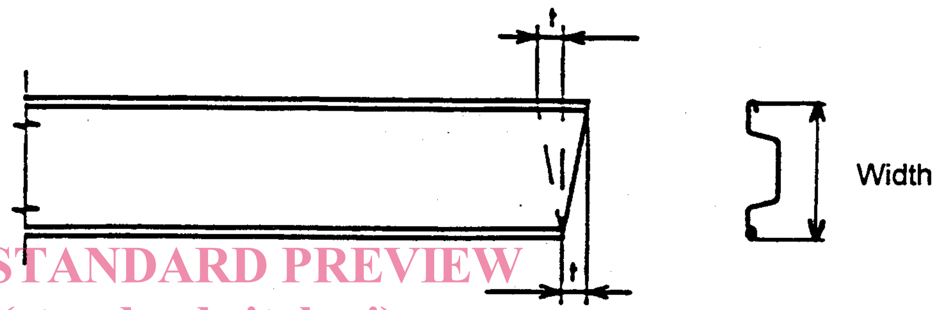


Figure 4 : Squareness of ends

When the sheet piles are delivered in seamed pairs by means of welds all along the lock, the upper end shall not present a misalignment (t) exceeding 20 mm.

10 Angular deviation

For special applications, the tolerance [2] on the flange angle α (see figure 5) may be agreed at the time of the enquiry and order.

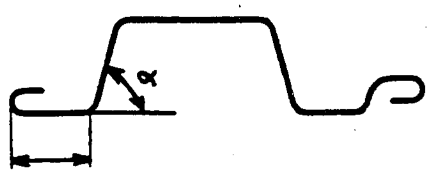


Figure 5 : Flange angle α

Option 2, See 13.3

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[2] This tolerance shall be ± 3 ° for piles where smaller leg length is ≤ 10 mm (see figure 5), ± 2 ° in the other cases