



**International
Standard**

ISO 21949

**Coated abrasives — Plain sheets
with holes for dust extraction**

*Produits abrasifs appliqués — Feuilles simples avec trous pour
extraction de la poussière*

**Second edition
2024-10**

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 29, *Small tools*, Subcommittee SC 5, *Grinding wheels and abrasives*.

This second edition cancels and replaces the first edition (ISO 21949:2001), which has been technically revised.

The main changes are as follows:

- addition of new type H;
- dimensions added for types B, C, F and the new type H;
- dimension added in [Table 1](#) for type B.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Coated abrasives — Plain sheets with holes for dust extraction

1 Scope

This document specifies the nominal dimensions, tolerances and designation of the active surface of plain sheets with holes for dust extraction. Extra length was taken into account in this document.

Plain sheets with holes for dust extraction in accordance with this document are intended for use on sanders with dust extraction.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 554, *Standard atmospheres for conditioning and/or testing — Specifications*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

4 Requirements

4.1 Types and dimensions

See [Figures 1](#) to [8](#) and [Table 1](#).

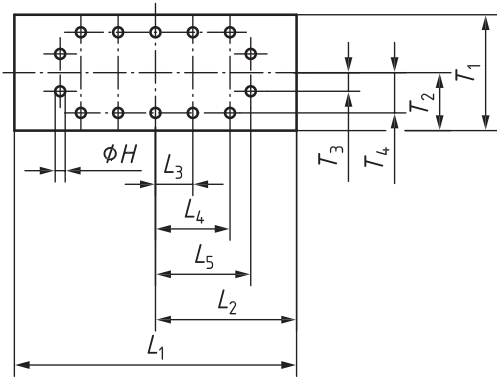


Figure 1 — Type A sheet

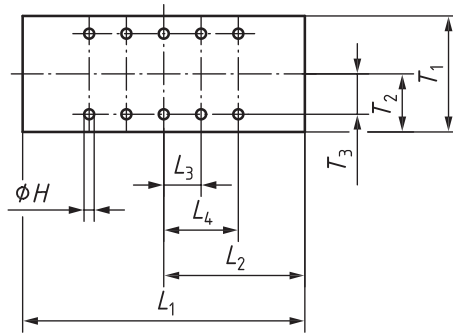


Figure 2 — Type B sheet

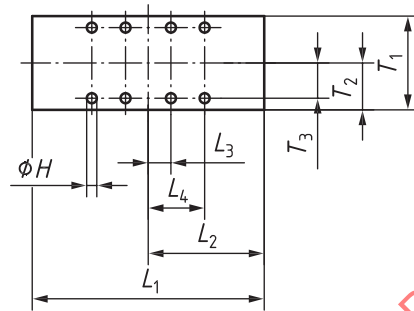


Figure 3 — Type C sheet

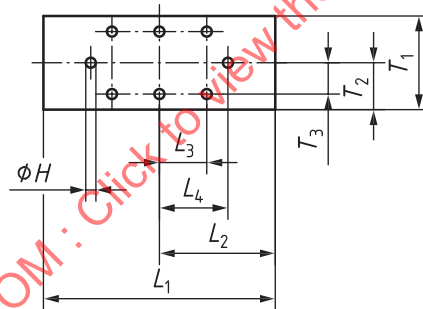


Figure 4 — Type D sheet

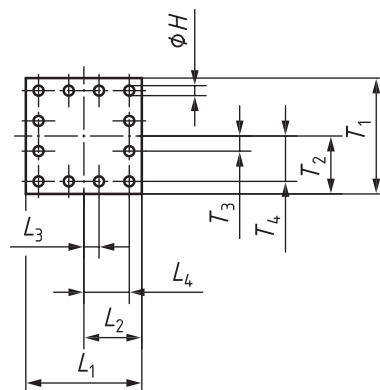


Figure 5 — Type E sheet

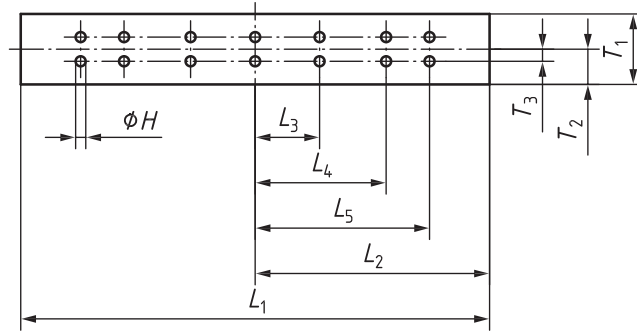


Figure 6 — Type F sheet

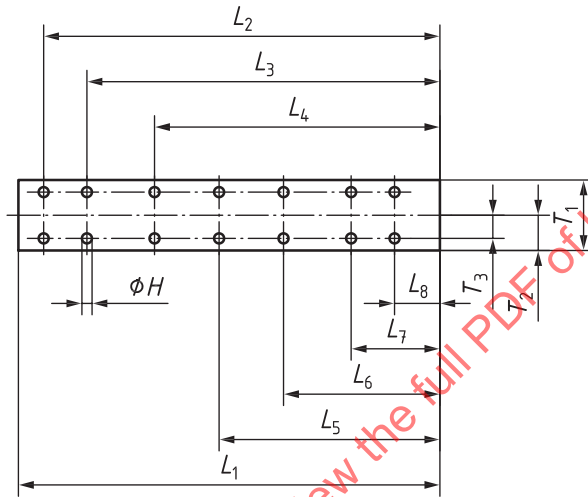


Figure 7 — Type G sheet

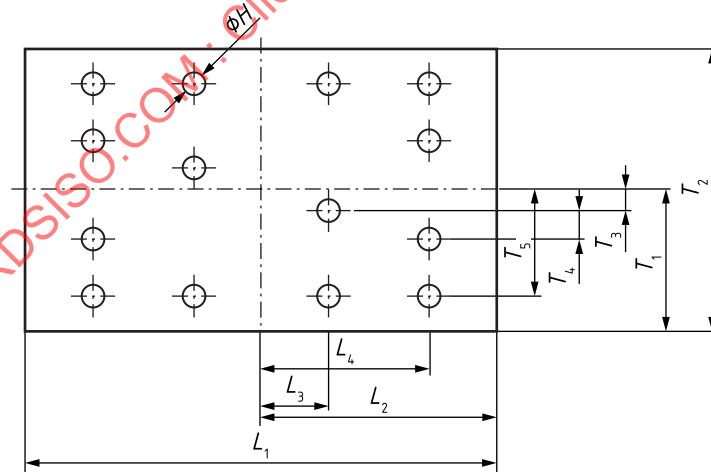


Figure 8 — Type H sheet

Table 1 — Dimensions

Dimensions in millimetres

Type	Size $T_1 \times L_1$ $\pm 1,5$		L_2 $\pm 0,5$	L_3 $\pm 0,5$	L_4 $\pm 0,5$	L_5 $\pm 0,5$	L_6 $\pm 0,5$	L_7 $\pm 0,5$	L_8 $\pm 0,5$	H $\pm 0,5$	T_2 $\pm 0,5$	T_3 $\pm 0,5$	T_4 $\pm 0,5$	T_5	Number of holes								
	T_1	L_1												$\pm 0,5$									
A	115	280	140	37	74	94,5	—	—	—	10	57,5	18,5	40	—	14								
	115	230	115																				
B	115	280	140	37	74	—	—	—	—	10	57,5	40	—	—	10								
	115	225	112,5																				
	115	230	115																				
C	93	230	115	22,5	56	—	—	—	—	10	46,5	35	—	—	8								
	93	186	93																				
	93	178	89																				
	80	166	83	19	48						40	30											
	80	130	65																				
	80	133	66,5													18,8	47,3						
	70	198	99	29	72						35	23											
D	93	230	115	47	68	—	—	—	—	10	46,5	31	—	—	8								
	93	186	93																				
	115	280	140	21	63						90	57,5	38	—	—	10							
E	115	115	57,5	15	45	—	—	—	—	10	57,5	15	45	—	12								
F	70	465	232,5	64	130	173	—	—	—	10	35	12	—	—	14								
	70	420	210	64	131	174						23											
G	70	127	100	74	48	22	—	—	—	10	35	24	—	—	8								
	81	153	106	81	56	31					40,5	25,5			8								
	70	418	393	350	283	219					155	88			45	35	23	14					
H	80	133	66,5	19	47,5	—	—	—	—	6	40	6	14	30	14								

4.2 Test conditions

The limit deviations given in [Table 1](#) are valid under the following conditions:

Temperature: $20\text{ °C} \pm 2\text{ °C}$

shall be in accordance with ISO 554

Relative humidity: $65\% \pm 5\%$

When plain sheets are tested they shall be stored for at least 24 h under the above conditions.

5 Designation

A plain sheet conforming to this document shall be designated by

- “Plain sheet”;
- a reference to this document, i.e. ISO 21949;
- type A, B, C, D, E, F or G;
- dimensions $T_1 \times L_1$ (size), in millimetres.

EXAMPLE A plain sheet of Type A with a dimensions $T_1 = 115\text{ mm}$ and $L_1 = 280\text{ mm}$ is designated as follows: