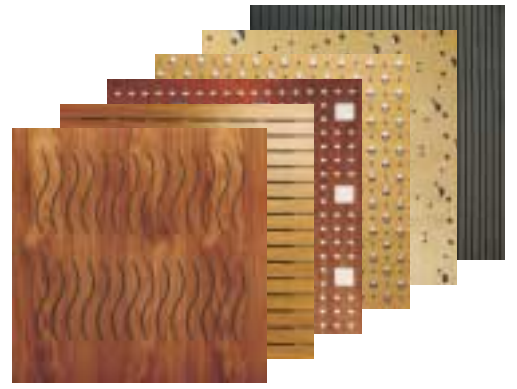


Elam

Fire retardant wood based panels
complete system for ceilings and walls



University of Helsinki, Finland, wall and ceiling panels in ash.



Agencia Tributaria, Montalbán, Madrid, Spain, Elam wall and ceiling panels in birch.



CLFSE Fire Brigade, Madrid, Spain, Elam wall and ceiling panels in birch.



Airport Helsinki, Finland, HPL-laminated wall panels.

PRODUCT DESCRIPTION

Elam panels are intended primarily for the interiors of public spaces requiring high quality appearance and workmanship. Panels are either smooth, perforated or slotted or grooved.

Cement bonded particleboard, which is fireproof and resists moisture, is used for core boards. In locations where fire classification requirements are not applicable, conventional wood based panels as plywood, chipboard or MDF may be used for core boards.

Panel surfaces is usually covered with lacquered (and stained) or waxed natural wood veneer. Other surface solutions are imitation foils, high pressure or real stone laminate or paint. All selected materials meet fire safety standards and aesthetic criteria.



Ministry of Industry, Madrid, Spain, Elam wall and ceiling panels in birch.



New Library of Turku, Finland, wall panels in waxed birch.



The National Board of Education building in Hakaniemi, Helsinki, wall and ceiling grooved Perfo-Linear in oak.



New Art Museum of Tallinn, Estonia, Elam wall and ceiling panels in birch.



Shopping Center Jumbo, Vantaa, Finland, Elam wall and ceiling panels in cherry.



New church of Klaukkala, Finland, Elam wall and ceiling panels in oak.



Nokia "Visit Center", Salo, Finland, quadrant perforated ElamInterior-panels, stained red beech.

ELAM PRODUCT SELECTION

Elam panels can be divided into the following product groups:

Elam -panels for wall and ceiling without or with acoustic perforations or slotts in 18 std types. Acoustic felt can be glued behind the panel, if necessary.

Elam -panels can be used as removable or solid suspended ceilings by using conventional suspension system. By combining perforated and plain and eventually arched panels, it is possible to provide many decorative and visual effects.

OTHER APPLICATIONS:

Curved **ElamForm** panels are used in inner or outer wall corners and in junction of wall and ceiling.

ElamTrellis is a lattice for wall or ceiling constructions made of massive wood, veneered chipboard or cement bonded particleboard.

ElamInterior is a thin perforated decoration panel. Perforation shape, size and hole distance can be chosen nearly freely according to customers wishes.

Perfo-Linear, Linear and Mosaic grooved panels.

Through coloured cement-bonded particleboard
Anthracite and Rubin.

Fixing accessories and special wood profiles are usually included into delivery.

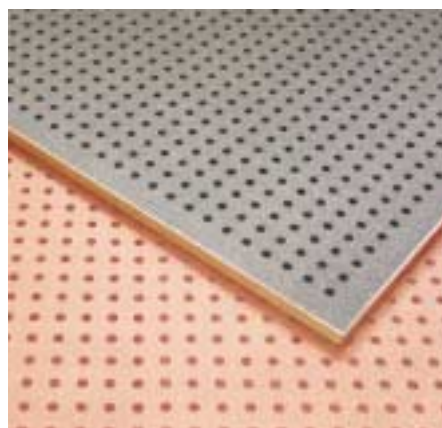
See the **Elam Technical Manual** for more details.



Elam-Form in red Beech. German School, Helsinki.



Town Hall of Ylöjärvi Finland, ElamTrellis in wall.



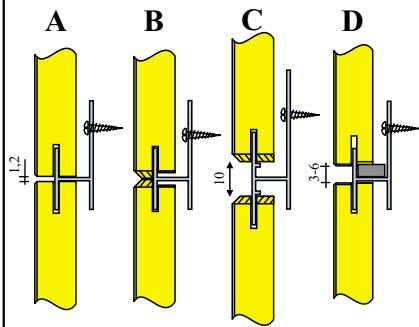
Trough coloured cementbonded particleboard

STANDARD RANGE

Std sizes (mm): Std thickness of panels 12 and 16 mm. Other sizes and thicknesses on request.	2600 x 1200 1200 x 1200	2590 x 1190 1190 x 1190
	2600 x 600 1200 x 600	2590 x 590 1190 x 590
	2600 x 300 600 x 600	2590 x 290 590 x 590
	2600 x 200	2590 x 190
Core boards:	As a rule, strong cement bonded particleboard is used as core material, but conventional wood based panels as well, if no fire classification is required e.g. chipboard, MDF or plywood.	
Surface alternatives: Unsurfaced panels:	All sizes, edge forms and perforations are available for raw panel as well as surfaced panel.	
Wood veneered panels: Lacquering: Low emission lacquering: Staining: Wax or oil treatment:	All commercial wood species available. Acrylate priming and two component surface lacquer. Low emission acrylate lacquering, TVOC emission less than $<10\mu\text{g}/\text{m}^2\text{h}$. Up to wish and sample of customer or up to given color code. Colorless or colored treatment.	
Painted panels:	Painting on special paper coated board. Balance film on back side. Colour stains according to e.g. NCS -code.	
Foil surfaced panels:	Wood imitation melamine and wall papers (small volumes not available).	
High Pressure Laminate (HPL) and StoneVeneer -laminates:	All well-known HPL accepted. StoneVeneer is a thin real stone layer surfaced laminate.	



JOINT TYPES



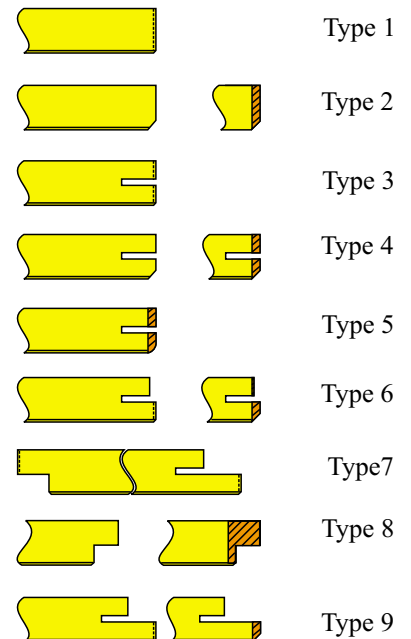
Type A: Concealed installation with PI-3510 profile. 1,2 mm open gap between panels.

Type B: Butt joint. No gap or very small gap between panels.

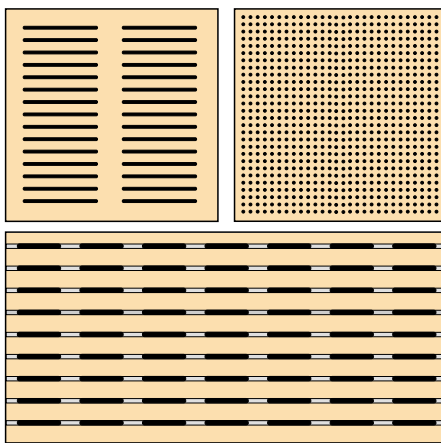
Type C: 10 mm open joint, fixing with aluminium profile PI-4510, which can be painted, anodised, covered with wood imitation or lacquered veneer.

Type D: 3-6 mm open joint, fixing with aluminium profile PI-3510, which can be painted, covered with wood imitation or lacquered veneer. The desired gap between panels can be achieved by putting a filling piece of e.g. mdf- or plywood inside the profile.

EDGE TYPES



ELAM PERFORATION TYPES



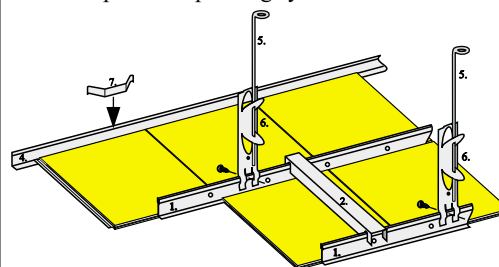
Perfo-Linear D6 C30

18 different standard types. For special types and details see:

Elam Technical Manual.

SUSPENDED CEILING

Example of suspending system.



FIRE PROPERTIES OF THE BOARDS
Cement bonded particleboard core: **B-s1, d0.**

QUALITY, ENVIRONMENT and SAFTY:
ISO9001:2000, ISO 14100 and OHSAS 18100

Edge covering alternatives:

- 0.** Unsurfaced edge
- A.** Wood or other imitation band
- B.** Real thin wood veneer, lacquered as surface
- C.** 2,0 mm thick wood veneer, lacquered as surface
- D.** 10 mm thick wood batten under surface veneer (edge type 8)

Elam Oy

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