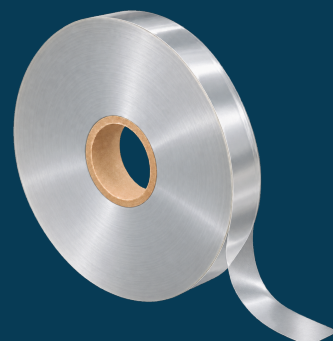


AL / PET - CABLE SCREENING LAMINATE

Aluminium / PET Laminate Tape

Popular constructions: 12/12, 12/23 and 25/23

Aluminium foil bonded to polyester film for individual-pair and overall electromagnetic screening in cable constructions.



Aluminium foil
CONDUCTIVE SCREEN

Polyester film
REINFORCING LAYER

Clear or coloured
PET-FACE OPTIONS

Manchester stock
FAST CONVERSION

FOIL SCREENING FOR SIGNAL INTEGRITY

Conductive foil with polyester reinforcement.

The aluminium layer helps reduce electromagnetic interference entering or leaving the cable. The PET layer reinforces the thin foil and provides an insulating face. Applied with suitable overlap and electrical termination, the laminate forms a lightweight screen with low construction build-up.

Typical applications in cable production

Instrumentation and control

Individual-pair or overall screening in measurement, process-control and industrial signal cables.

Data and communication

Foil screens around pairs or the cable core in screened LAN, fieldbus and RS-485 constructions.

Coaxial, CCTV and audio

Foil screening in coaxial and video cables, often combined with braid; also used in screened audio cables.

Security and fire-alarm circuits

Screening for signal circuits where specified by the cable design. AL/PET provides screening, rather than a mica-type fire barrier.

Material advantages

High screen coverage

Overlapped foil can provide full geometric coverage of the wrapped core.

Low construction build-up

Thin laminate limits the added size and weight of the screen.

Polyester reinforcement

PET supports foil handling and integrity during application.

Individual or overall

Use around pairs, groups or the complete cable core.

Foil and braid systems

Can be combined with braid to suit the screening design.

Colour to specification

Clear and blue PET-face options; other colours can be sourced.

MANCHESTER STOCK / SLITTING AND SPOOLING

Master rolls held in Manchester support fast slitting and spooling, smaller minimum order quantities and flexible production requirements. Other foil / film thickness combinations and colours can be sourced to customer specification.

Image represents clear-PET 12/12 laminate: glossy PET outside, metallic aluminium inside. Blue PET-face stock is also held.

Technical data

Construction code = aluminium / polyester nominal layer thickness, in μm

PROPERTY	UNIT	9/12	9/15	9/23	12/12	12/23*	25/23
Aluminium thickness	μm	9 $\pm 8\%$	9 $\pm 8\%$	9 $\pm 8\%$	12 $\pm 8\%$	12	25 $\pm 8\%$
PET thickness	μm	12 $\pm 5\%$	15 $\pm 5\%$	23 $\pm 5\%$	12 $\pm 5\%$	23	23 $\pm 5\%$
Total thickness	μm	23 ± 3	26 ± 3	34 ± 3	26 ± 3	37 $\pm 10\%$	51 ± 4
Mass per unit area	g/m^2	43.2 ± 4	47.4 ± 5	58.6 ± 6	51.3 ± 6	68 $\pm 10\%$	103 ± 10
Yield	m^2/kg	23.1 $\pm 8\%$	21.1 $\pm 8\%$	17.1 $\pm 8\%$	19.5 $\pm 8\%$	14.8 $\pm 10\%$	9.7 $\pm 8\%$
Minimum tensile strength	N/mm^2	≥ 90	≥ 100	≥ 110	≥ 90	≥ 100	≥ 90
Minimum elongation	%	≥ 50	≥ 60	≥ 70	≥ 40	≥ 50	≥ 20

Mechanical values are in the machine direction (MD) for the five supplied CTUK grade specifications. The 12/23 reference does not state test direction. 1 $\text{N/mm}^2 = 1$ MPa. Total thickness includes the laminating bond and is greater than the sum of the nominal foil and film layers.

*12/23: reference values, pending confirmation for the supplied construction. CTUK sources from multiple master-roll manufacturers; the agreed specification and tolerances are confirmed for each supply. Other columns retain the supplied CTUK grade data.

Supply formats

FORMAT / DIMENSION	PAD WOUND	SPOOL / TRAVERSE
Slit width	8-900 mm	5-60 mm
Core internal diameter	76 or 152 mm	76 mm
Maximum outer diameter	550 mm	300 mm
Core width	Not applicable	100-350 mm

Custom slit widths, sizes and winding arrangements are available on request. Availability of each construction, colour and format is confirmed at quotation.

Application and construction guidance

Select foil and PET thicknesses to suit screening requirements, handling and cable build-up. Control overlap and tension to avoid gaps, wrinkles and foil damage. Position the conductive face to maintain contact with the specified drain wire, braid or termination; the PET face is electrically insulating. Validate continuity and screening on the finished cable.

OTHER CONSTRUCTIONS / COLOUR OPTIONS

Clear or coloured PET-face laminates and constructions outside this range can be sourced to suit customer requirements.

Values describe the laminate, not guaranteed finished-cable EMC performance. Confirm the agreed supply specification before production.