Natural Building Technologies

System for Roof Pitched

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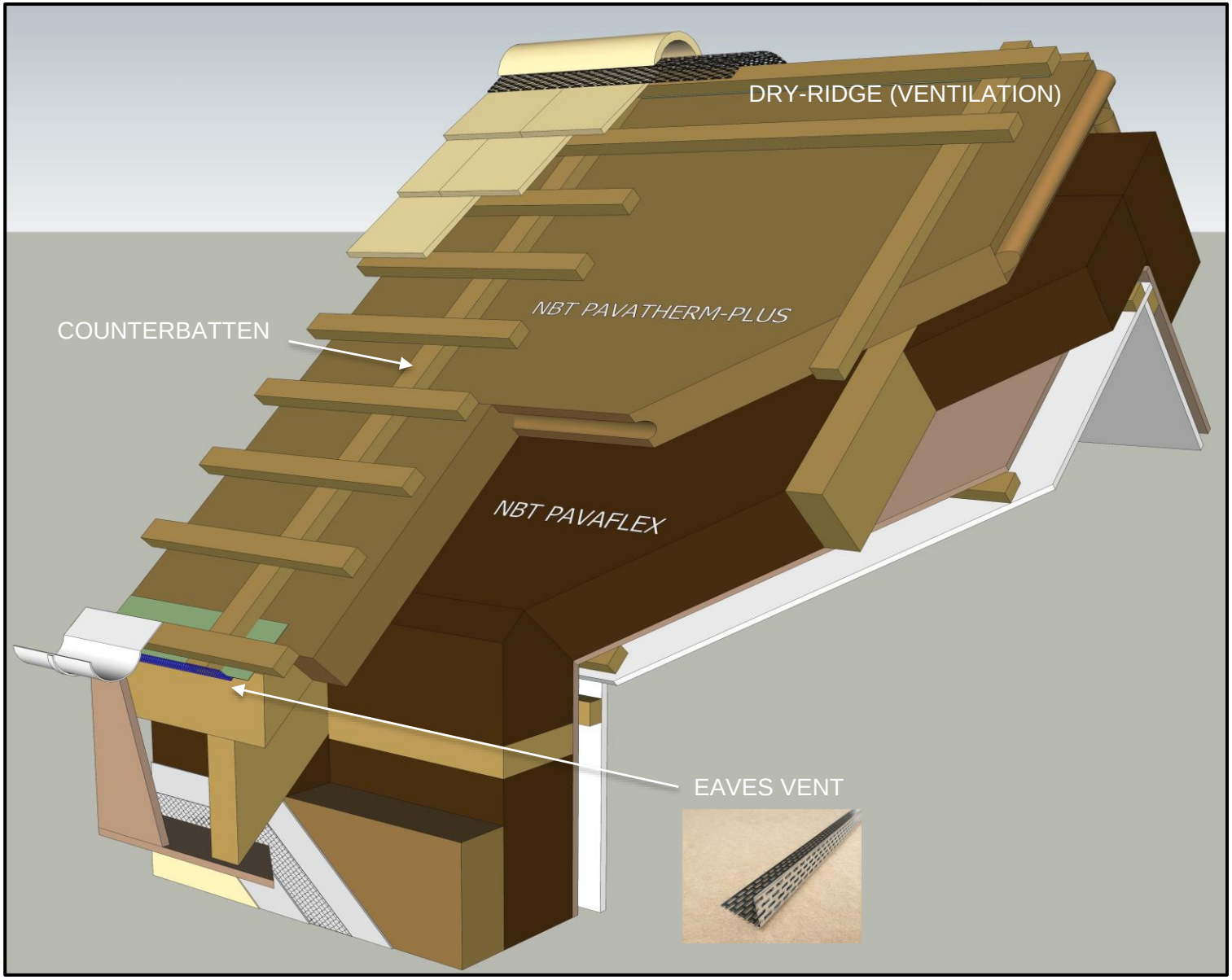

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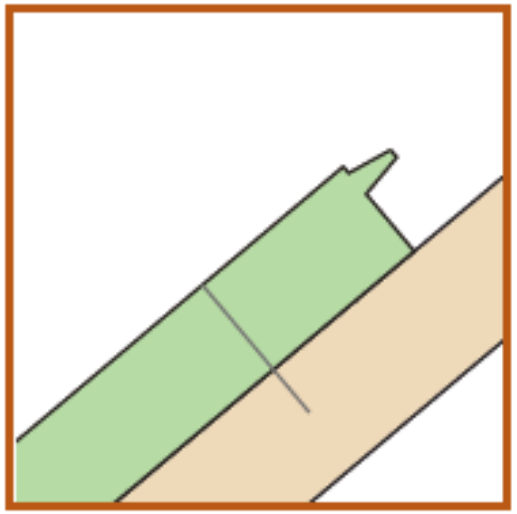
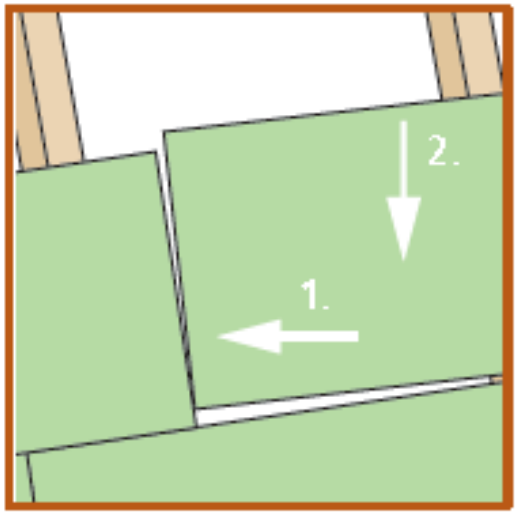
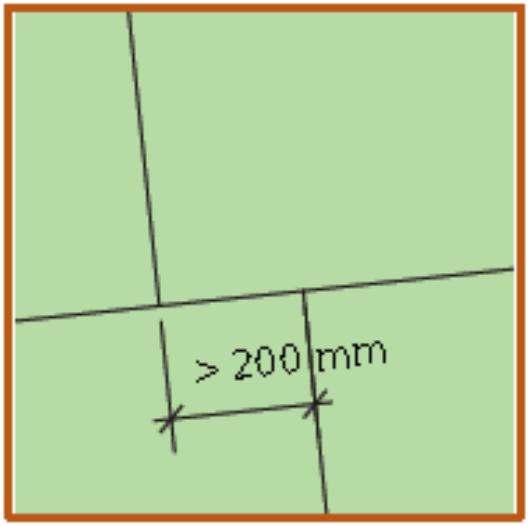


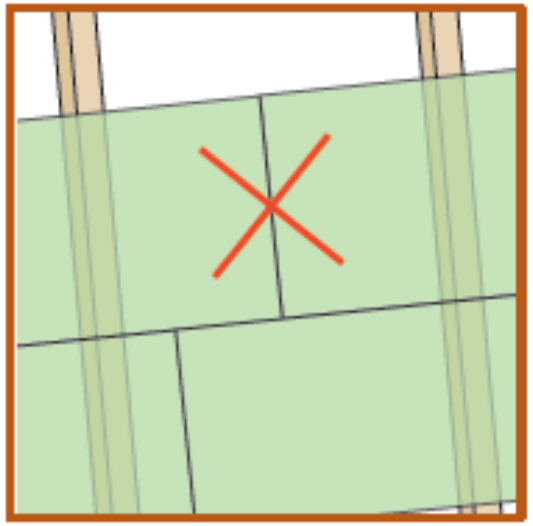
Fix initial course or sprocket
(Offset T&G towards top surface)



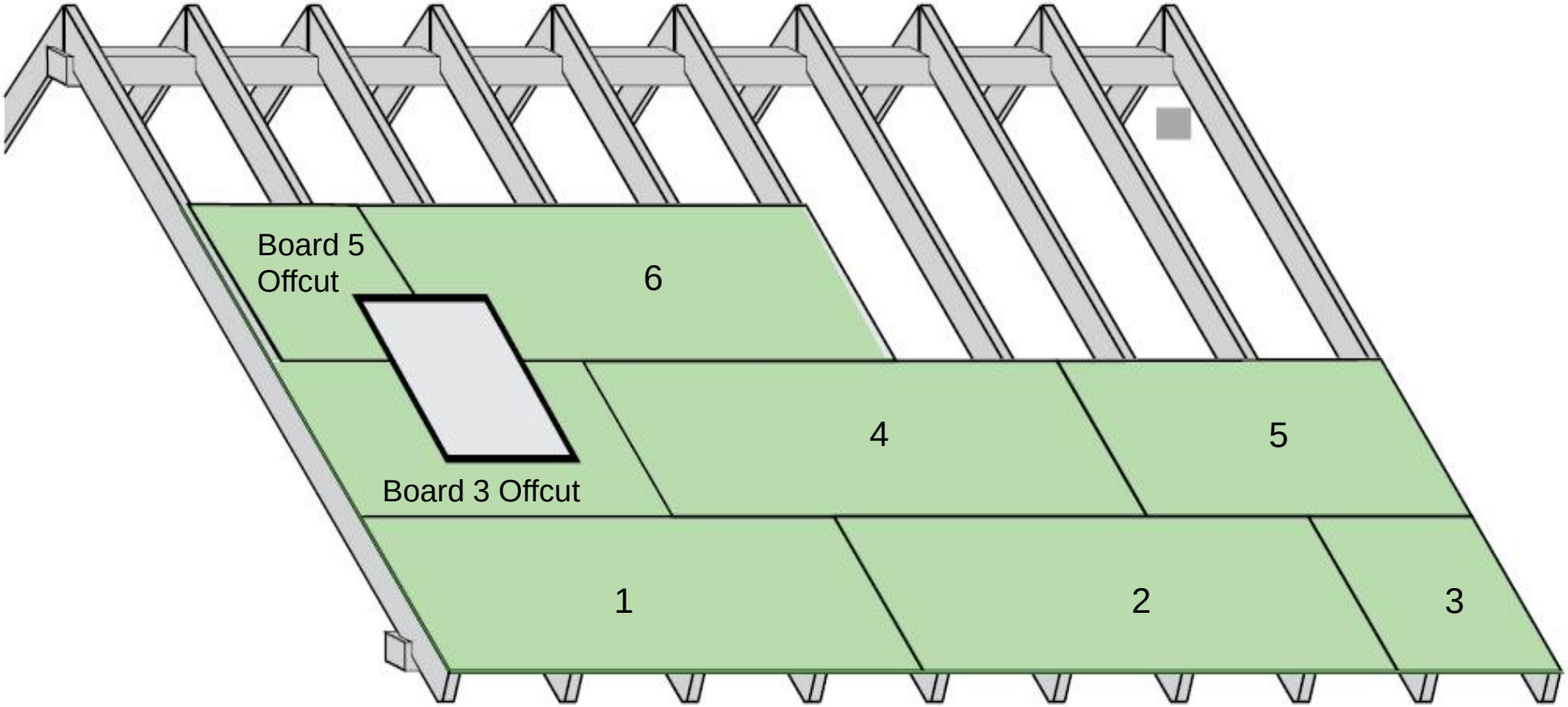
Tightly butt together
to engage T&G



Minimum stagger – use skill saw with extraction for board cuts



Stagger to avoid joints in same rafter space for adjacent courses

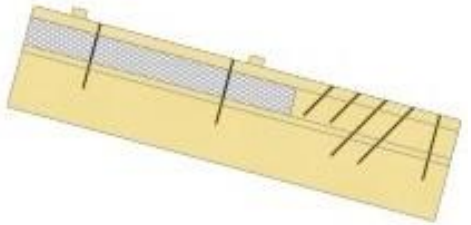

Board 5
Offcut
6
Board 3 Offcut
4
5
1
2
3

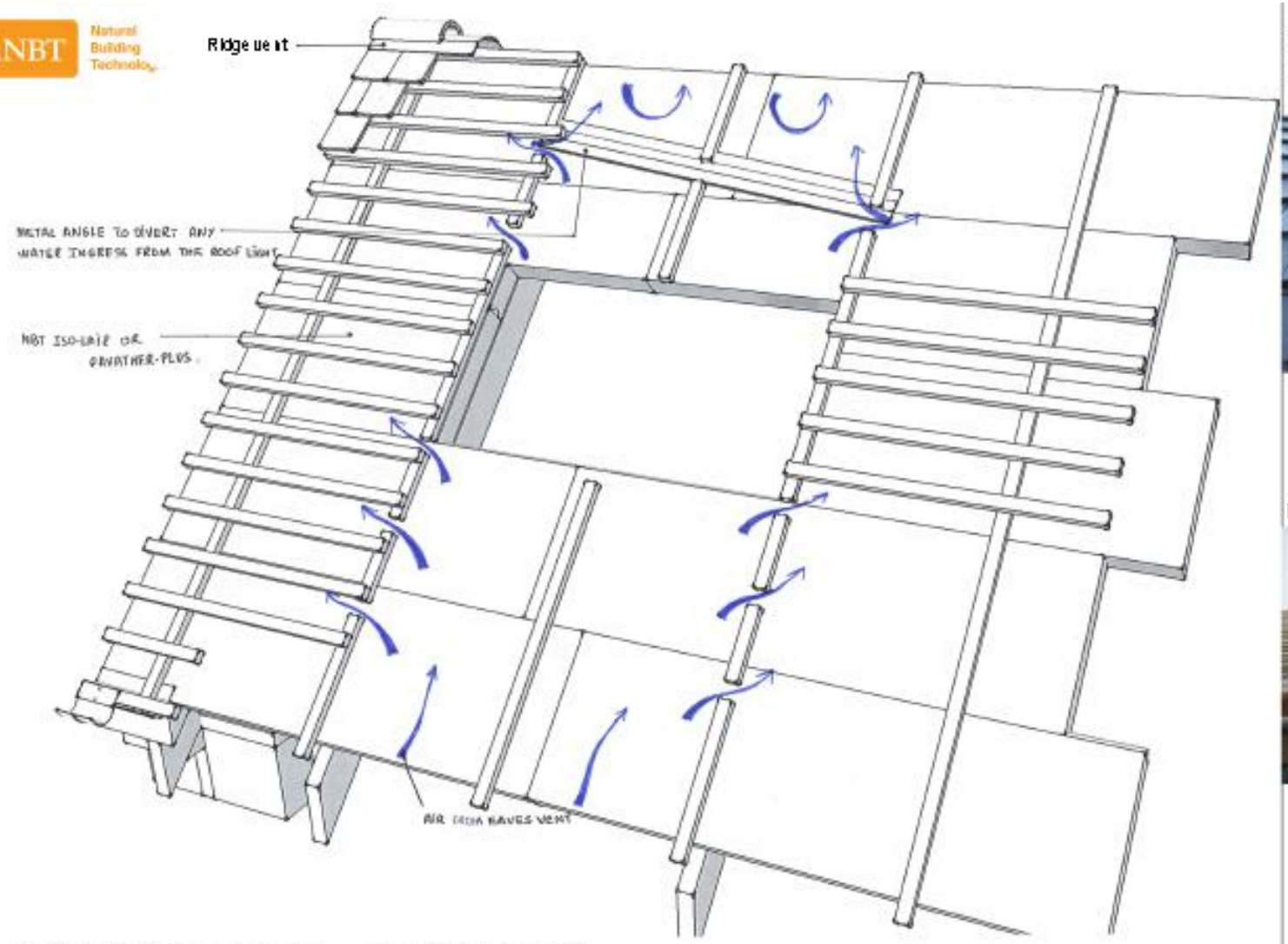
Final fix through counter-batten

Fixing Centres	Fixings per m^2 according to rafter centres				
	400	600	800	1000	1200
100	25.0	16.7	12.5	10.0	8.3
125	20.0	13.3	10.0	8.0	6.7
150	16.7	11.1	8.3	6.7	5.6
175	14.3	9.5	7.1	5.7	4.8
200	12.5	8.3	6.3	5.0	4.2
225	11.1	7.4	5.6	4.4	3.7
250	10.0	6.7	5.0	4.0	3.3
275	9.1	6.1	4.5	3.6	3.0
300	8.3	5.6	4.2	3.3	2.8
325	7.7	5.1	3.8	3.1	2.6
350	7.1	4.8	3.6	2.9	2.4
375	6.7	4.4	3.3	2.7	2.2
400	6.3	4.2	3.1	2.5	2.1
425	5.9	3.9	2.9	2.4	2.0
450	5.6	3.7	2.8	2.2	1.9
475	5.3	3.5	2.6	2.1	1.8
500	5	3.3	2.5	2.0	1.7

Board	Board Thickness	Counter-batten thickness	Fixing length (perpendicular to board)	Sliding load fixing length (fixings @60°)
Isolair	20	25	90	100
		38	100	120
		50	110	130
	35	25	100	120
		38	110	130
		50	130	150
Isolair / Pavatherm Plus	60	25	130	150
		38	140	160
		50	150	170
Pavatherm Plus	80	25	150	170
		38	160	180
		50	170	200
	100	25	170	200
		38	180	210
		50	190	220
	120	25	190	220
		38	200	230
		50	210	240

Determine fixing numbers per m^2 according to site specific conditions - (BS 5534: 2014 and BS EN 1991-1-4: 2005). Numbers in light green boxes are the most common requirements for pricing purposes. The numbers in darker green is NBT's standard recommendation for EJOT TKR 4.8 fixings with 40mm embedment for roof pitch < 60° on buildings <2 storeys, subjected to wind speed < 26m/s, and dead load of roof covering <95kg/m^2 using perpendicular screws only. If using a combination of fixings perpendicular to the board and at 60° for sliding load, numbers per m^2 will be lower than standard as this method delivers a more effective load retention. Sprockets over each rafter end to support sliding load (minimum 2 x angled sliding load fixings plus 2 x suction fixings perpendicular per sprocket) will acheive the same result and may be a simpler means of reducing fixing numbers. If using Helifix Inskew 600, please contact the manufacturer for a calculation.





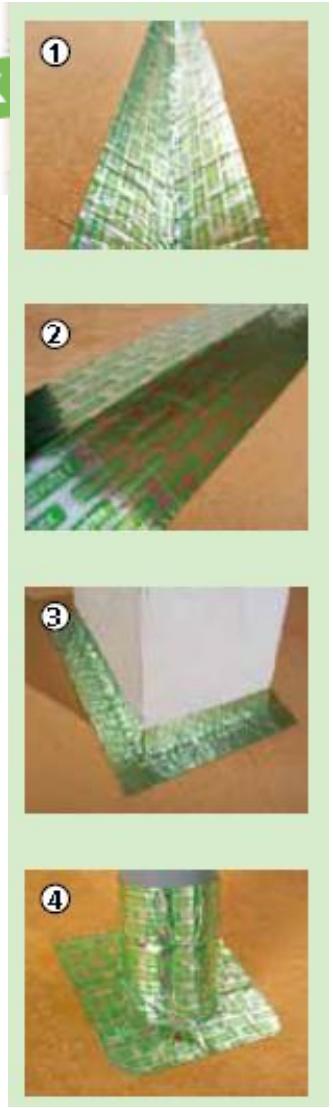
NBT ROOF LIGHT _ VENT DETAIL

ALTERNATIVE - Use Tile vents at the base and top of roof light window -

Eaves Vents -

See Technical Manual, Specification Clauses and Catalogue of Standard Detail Drawings for more information

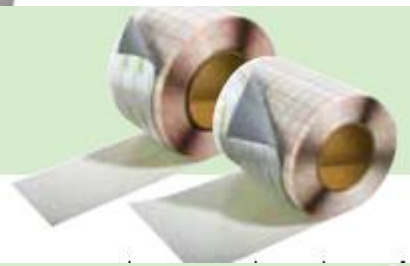
Sealing Weathertight



All non T&G joints: Junctions with roof-lights, verge etc; over eaves tray, damaged areas of boards, exposed board edges, penetrations, and ridge (membrane strop as alternative).

PAVABASE
Solvent-free standard primer for PAVATAPE

PAVATAPE 75 / 150
Butyl rubber tape for sealing PAVATEX-boards



PAVATAPE FLEX
Elastic butyl rubber tape for sealing PAVATEX-boards and -membranes at penetrations