

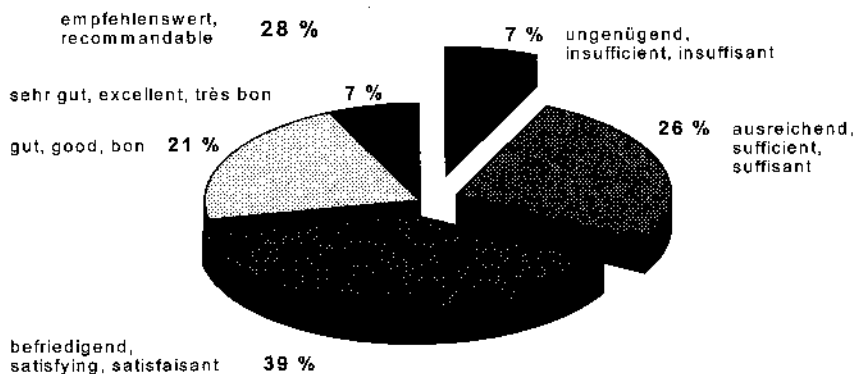
Difference in characteristics for standardized roofing sheets.

A summary of the test results from the new textbook Roof Sealing – Rooftop planting, Part II, W. Ernst, 1999.

A comprehensive comparison of 105 plastic, rubber and bituminized roofing sheets and liquid membranes produced by 39 manufacturers in 11 countries helps clarify the current market situation.

The direct comparisons are based on 13 practical tests. It is important, that only a test stress in the same way and the same time with a lot of difference sheets gives a comparison in proportion to the mean value. They are classified in positive or negative.

- Test 01 – Low temperature flexibility
- Test 02 – Puncture resistance
- Test 03 – Action on cigarette heat
- Test 04 – Resistance against brazing beads
- Test 05 – Behaviour after coating with grease
- Test 06 – Low temperature folding
- Test 07 – Storage in hot water
- Test 08 – Storage in limewash
- Test 09 – Storage in sulfuric acid solution
- Test 10 – Behaviour against microorganisms
- Test 11 – Hydrolytic resistance
- Test 12 – Fishtest
- Test 13 – Cold contraction



The assessment takes all test results into consideration, i.e. the data relating to design, artificial ageing, biological and chemical stress also ecological aspects and cold contraction were combined to give one rating. The individual results, on the one hand, show the enormous diversity of characteristics within the individual groups of materials. On the other hand, they also show that it is possible to manufacture outstanding products from almost all material groups.

It is left up to the individual to weight the assessments accordingly.

The roofing sheets that did best in all tests without any appreciable change in material characteristics. And the better the assessment of the sheet, the better the ageing characteristics and long-term use.

The highest rated roofing sheets show the standard of quality that can be achieved today.

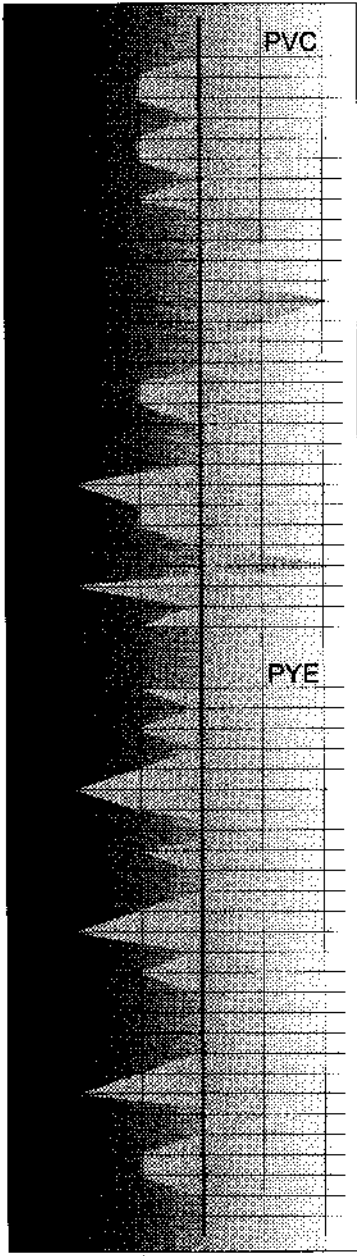
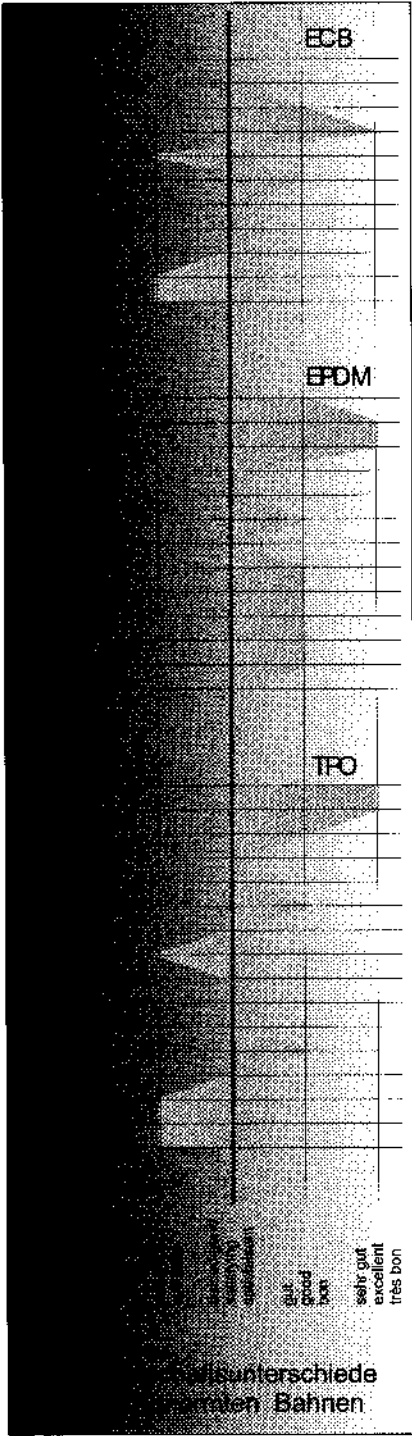
Tendencies amongst the main material groups, determined on the basis of the test results for 1991 and 1998.

At 67 %, the proportion of satisfactory to very good roofing sheets is reassuringly high, reflecting the high quality standards in the European flat roof market.

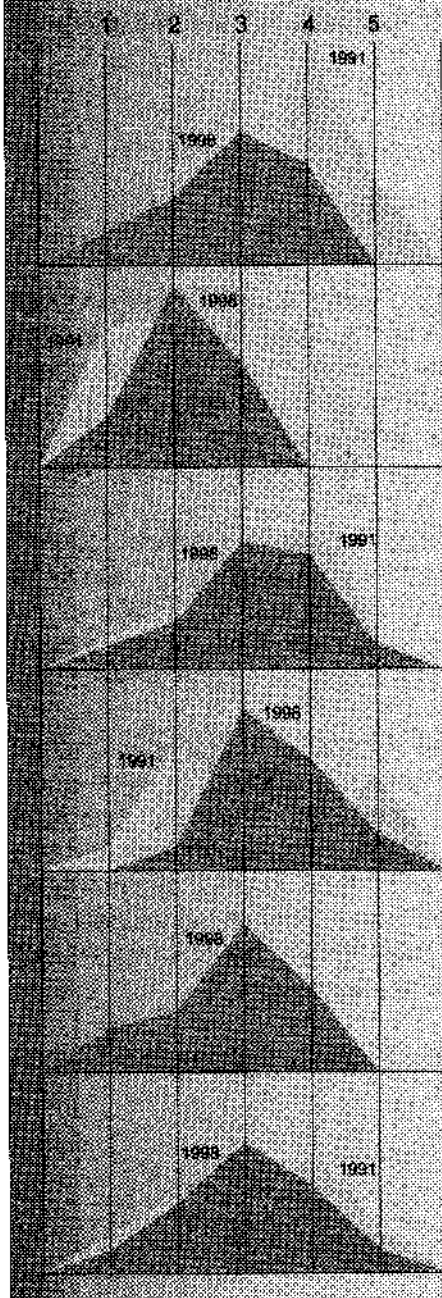
With 39 % of sheets rated as satisfactory, it is clear where the main focus lies and what the consequences of the drop in prices in recent years have been.

The figure of 28 % of sheets rated as good to very good shows that there is a demand and that individual manufacturers are in a position to meet this demand with appropriately high-quality materials.

At the end of the day, it is up to the person responsible to choose the most suitable roofing sheet for the purpose intended in order to achieve the best result for the particular project.



Bewertung nach Schwingen



ECB	1991	1998	Veränderungen Change Change ment
1	-	10 %	+ 10
2	-	20 %	+ 20
3	-	40 %	+ 40
4	75 %	30 %	- 45
5	25 %	-	- 25

↑ + 70 %

EPDM	1991	1998	Veränderungen Change Change ment
1	43 %	15 %	- 28
2	43 %	54 %	+ 11
3	14 %	31 %	+ 17
4	-	-	-
5	-	-	-

↓

PVC	1991	1998	Veränderungen Change Change ment
1	8 %	7 %	- 1
2	19 %	14 %	- 5
3	15 %	38 %	+ 23
4	50 %	34 %	- 16
5	8 %	7 %	- 1

→

PYE	1991	1998	Veränderungen Change Change ment
1	7 %	-	- 7
2	37 %	7 %	- 30
3	14 %	48 %	+ 34
4	14 %	33 %	+ 19
5	28 %	11 %	- 17

→

TPO	1991	1998	Veränderungen Change Change ment
1	-	13 %	+ 13
2	-	18 %	+ 18
3	-	44 %	+ 44
4	-	25 %	+ 25
5	-	-	-

↑ + 75 %

Alle 105 Proben	1991	1998	Veränderungen Change Change ment
1	11 %	7 %	- 4
2	25 %	21 %	- 4
3	15 %	39 %	+ 24
4	36 %	28 %	- 10
5	13 %	7 %	- 6

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