

# Schlegel Weather Seal Range



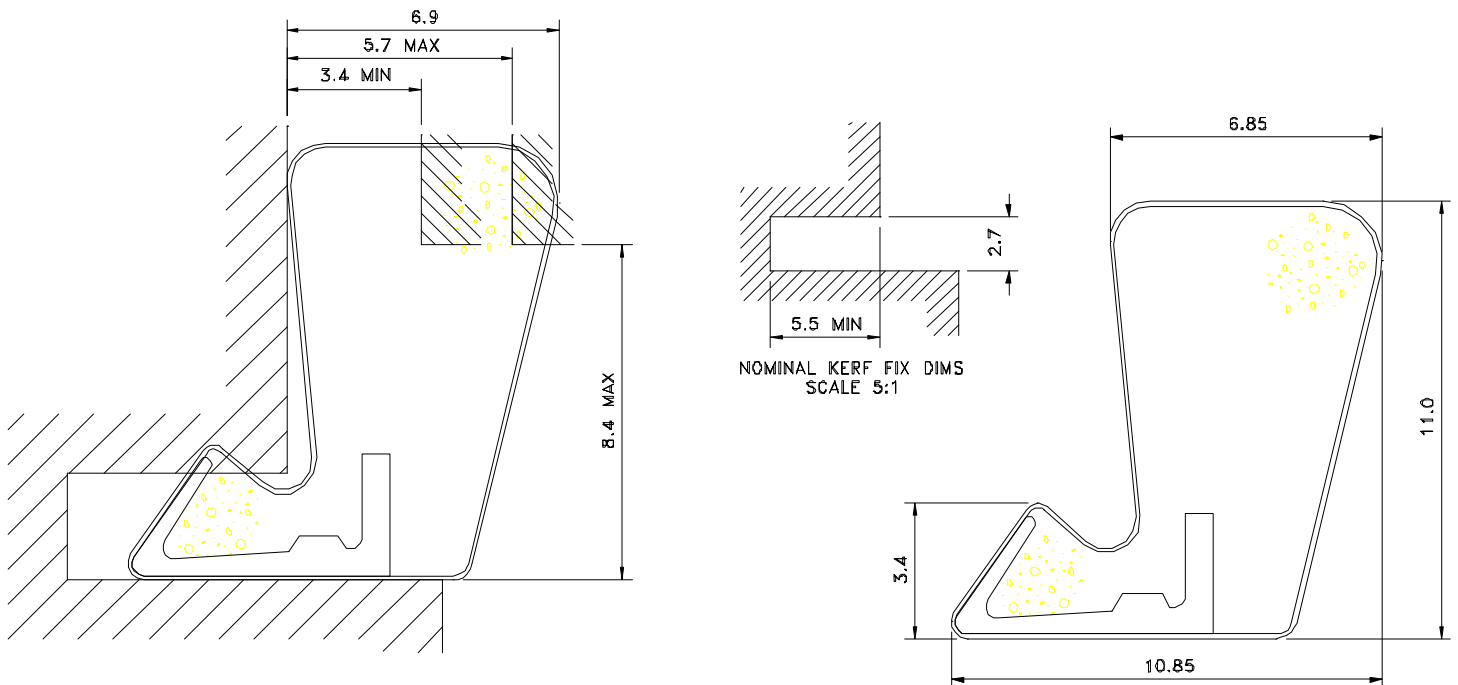
Technical Data Sheet  
Product = Aquamac 109

Testing undertaken to ISO 9001/2000; BSI Registration FM15052 (since 29/07/1992)

Specification			
Characteristic	Value	Units	Test Method
<b>ACLD</b> (Aged Compression Load Deflection)	4.0 – 10.0 N/100mm	Newtons per 100mm length	In House
<b>Compression Set</b>	>20% set after 24hours (50% compression) @ 70°C	% Recovery mm	In House
<b>Dimensions</b>		mm	In House

[BS EN 12365:2003](#) Part 4 Classification W 2 6 5 6 6 (Please note – ‘recovery after aging’ is not applicable to this assessment)

## Drawing Detail



## Material / Components

Exterior Liner = Poly-ethylene, low friction, UV stable  
Exterior Liner Melt Index = approx. 0,85 g/10 min at 190 °C., 2,16 kg mass – 2.0MI  
Hard Foot / insert = Poly-propylene  
Foam Core = H/R Poly-Urethane, exhibiting excellent memory performance over wide temp range

## Nominal Value of Thermal Conductivity

Low density P.E (used for the outer skin) is advised at 0.33 W/mKelvin  
P.U.foam at a density of 70Kg / cubic mtr having a conductivity of 0.05 W/mKelvin  
*A proposed nominal value for all our seals = 0.06W/mKelvin.*

## Fire Rating

These seals are NOT fire resistant but can be used in conjunction with intumescent strips as 'smokeseals' – Smoke seal application testing is undertaken on the whole door set and as such we are unable to provide information on individual seals

## Nominal Values for Sound Reduction Weighting

$R_w(C, C_{tr}) = 32 (-1; -3)$ dB  
 $R_w(C, C_{tr}) = 22 (-1; -1)$ dB  
 $R_w(C, C_{tr}) = 16 (-1; 0)$ dB  
 $R_w(C, C_{tr}) = 29 (0; -2)$ dB

## Packaging Specification

UK Card packing; 2 Coils per box; Nominal \*\*\*m / Coil

Coil = 825 OD – 425 ID; Box = 710\*710\*380mm

## Part Number Details

02400000	AQ 109 WHT 250M PRINTED	CL	250
02400001	AQ 109 BRZ 250M PRINTED	CL	250
02400002	AQ 109 BLK 250M PRINTED	CL	250
02400011	AQ 109 BRZ 10M	CL	10
02400020	AQ 109 WHT 25M	CL	25
02400021	AQ 109 BRZ 25M	CL	25
02400100	AQ 109 WHT 100M	CL	100
02400101	AQ 109 BRZ 100M	CL	100
02400103	AQ 109 BGE 250M	CL	250
02400106	AQ 109 RAL GRY 250M	CL	250
02400109	AQ 109 BRZ 250M	CL	250
02400110	AQ 109 WHT 250M	CL	250
02400111	AQ 109 BLK 250M	CL	250
02400112	AQ 109 LGHT OAK 250M	CL	250
02400113	AQ 109 BRZ 250M (BRECOS)	CL	250
02400200	AQ 109 WHT 500M BP CL	CL	500
02400203	AQ 109 BGE 500M BP CL	CL	500
02400210	AQ 109 WHT 250M REV	CL	250
02400211	AQ 109 BLK 250M REV	CL	250
02400212	AQ 109 L/OAK 250M REV	CL	250
02400213	AQ 109 BGE 250M REV	CL	250
02400219	AQ 109 BRZ 250M REV	CL	250
02400262	AQ 109 BLK 600M REV	CL	600
02401110	AQ 109 WHT 10M	CL	10

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## BBA Report

CRITERIA	B.B.A. 345/1 1993	B.B.A. Report 1990	Comments
TENSILE STRENGTH AFTER AGEING	< 25% REDUCTION AFTER 10 DAYS AT 70 <sup>0</sup> C	0% REDUCTION AFTER 28 DAYS	Q-Lon Exceeds the requirement
ELONGATION AT BREAK AFTER AGEING.	< 25% REDUCTION	> 5% REDUCTION AFTER 28 DAYS.	Q-Lon Exceeds the requirement
HARDNESS CHANGE AFTER AGEING	< 25% REDUCTION AFTER 10 DAYS AT 70 <sup>0</sup> C	COMPRESSION FORCE CHANGED BY 5% AFTER 28 DAYS	Q-Lon Exceeds the requirement
TEAR RESISTANCE	RAW MATERIAL TEST ONLY	NO ASSESSMENT	
DEFLECTION RECOVERY 24HRS @ 23 <sup>0</sup> C	> 75% RECOVERY	91.67% RECOVERY @ 70 <sup>0</sup> C	Q-Lon Exceeds the requirement
24hrs @ -15 <sup>0</sup> C	> 75% RECOVERY (LESS THAN 25% SET	100% RECOVERY	
14DAYS @ 55 <sup>0</sup> C	>25% RECOVERY	NOT ASSESSED	
OZONE RESISTANCE		NOT ASSESSED & NOT AFFECTED BY OZONE	This criteria is a limitation of Rubber / E.P.D.M.
DIMENSIONAL STABILITY	HEAT REVERSION < 2%	DIMENSIONAL STABILITY 0.01%	Q-Lon Exceeds the requirement

The B.P.F. have reviewed the 345/1 document and are shortly to publish a revision. The revisions take account of current European draft standards for seals and will most likely include the following changes.

1. Test methods will not be limited to raw material assessment.
2. The test methods will allow the seal performance to be graded as opposed to minimum levels being specified. The system is intended to allow an appropriate seal to be specified for an application. Minimum performances are still assessed via the functionality tests of the complete window / door unit.

### **Performance Benefits Summary**

**Excellent memory** – Returns to original shape after compression

**Stability** – Low/no stretch gained by GF internal cord or insert

**Easily compressed** – Low compression forces, Unaffected by temp variance (tested to -30oC to +70oC)

**Acoustic performance** – Independent testing and comparison data available

**Paint and Stain Proof** – Properties un-affected by standard paints and stains

**Stabilised** – Unaffected by rot, Fungi, UV light or Ozone.

**Colour** – Wide range of available options (bronze, white, black, greys, etc)

**Jointing** – Can be joined with silicone sealant or welded in situ'

**Patented.** – Selling seals to the industry for over 30 years

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