

## Type of load

Static load at room temperature.  
No danger for people, objects or environment.  
Constant factors (temperature, filling level,...)

S

1.3

Variable or alternating load.

Danger for people, objects or environment.  
Constant factors (temperature, filling level,...)

2.0



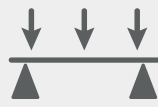
Type of liquid

Liquid reduction  
factor ( $A_{2k}$ )

1.0 for water.

Other liquids:

PTS - annex D



Type of load  
Safety Factor (S)

## Material-temperature factor ( $A_1$ )

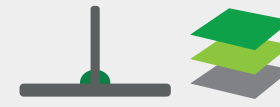
Material	Temperature			
	-10°C	20°C	40°C	50°C
HDPE Prime	1.2	1.0	1.0	N/A
PP Copo Prime	1.2	1.0	1.0	1.0



Material & Temperature  
Material-temperature factor ( $A_1$ )

## Type welding

Type welding	HDPE Prime		PP Prime	
	$f_s$	$f_L$	$f_s$	$f_L$
Heated tool butt welding (HS)	0.9	0.8	0.9	0.8
Hot gas extrusion welding (WE)	0.8	0.6	0.8	0.6



Weld type & material  
Weld factor ( $f_L$ )

Design resistance ( $\sigma_{al}$ )

$$\sigma_{al} = \frac{K \cdot f_L}{A_1 \cdot A_{2k} \cdot S}$$

Creep load (K)

Actual strain ( $\sigma_b$ )

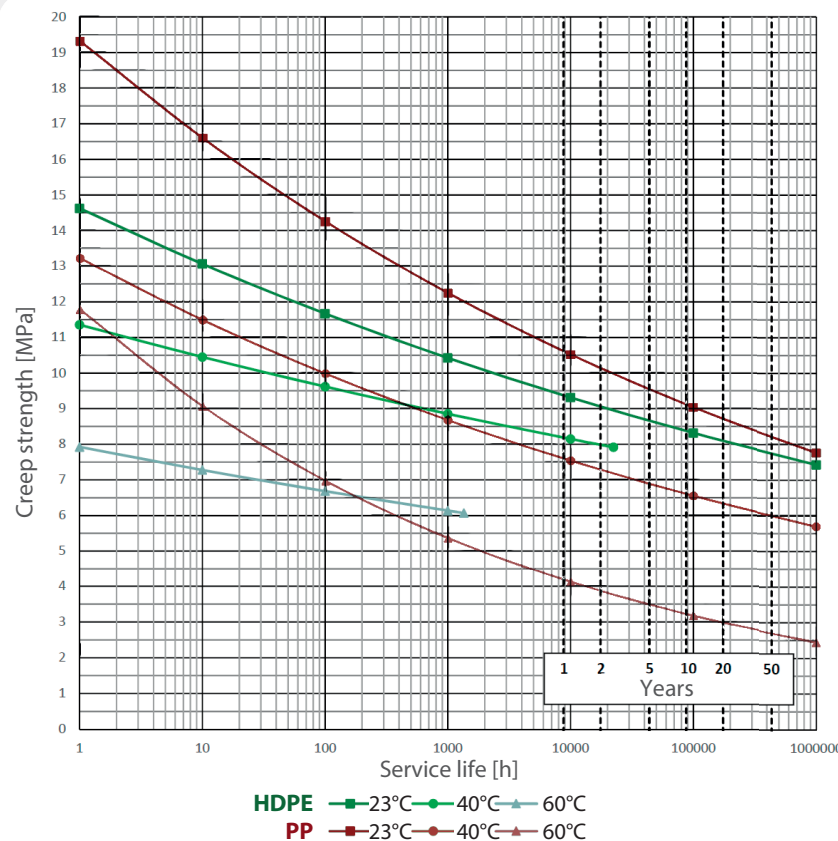
Paneltim® Technical Standard:  
See paragraph 6.2.3

## CRITERIA FOR THE PANELS:

The maximal strain must be lower than the design resistance.

$$\sigma_b < \sigma_{al}$$

This Quick Chart always needs to be used in combination with the Paneltim® Technical Standard (PTS). In the PTS underlying formulas and technical data for use of this Quick Chart are documented in detail. For correct use of this Quick Chart, a thorough knowledge and understanding of the Paneltim® Technical Standard is required.



Material



Service life



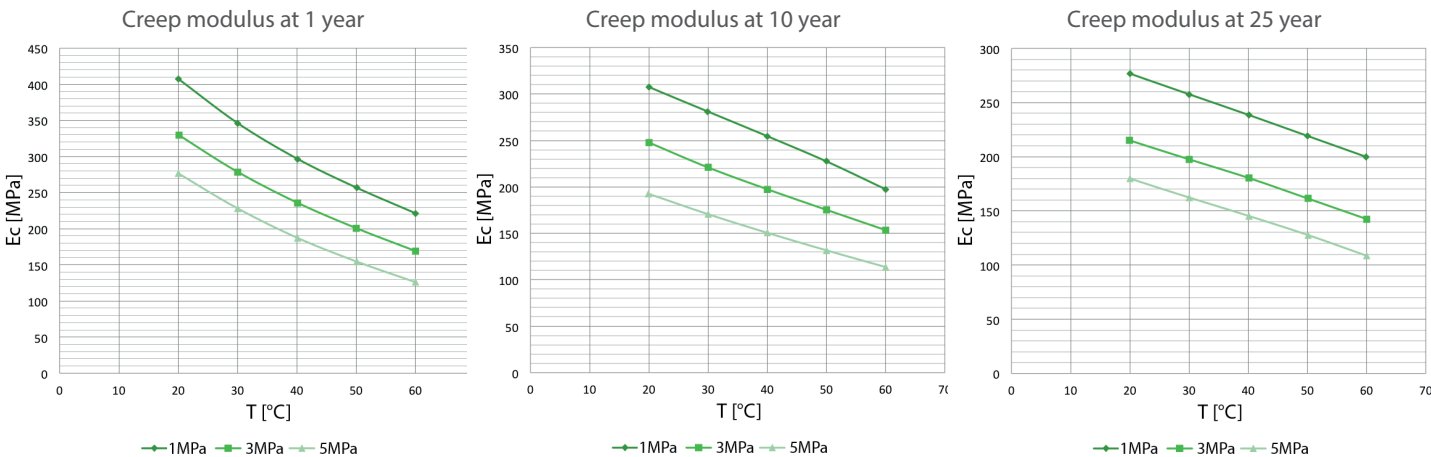
Temperature

Bending (f)

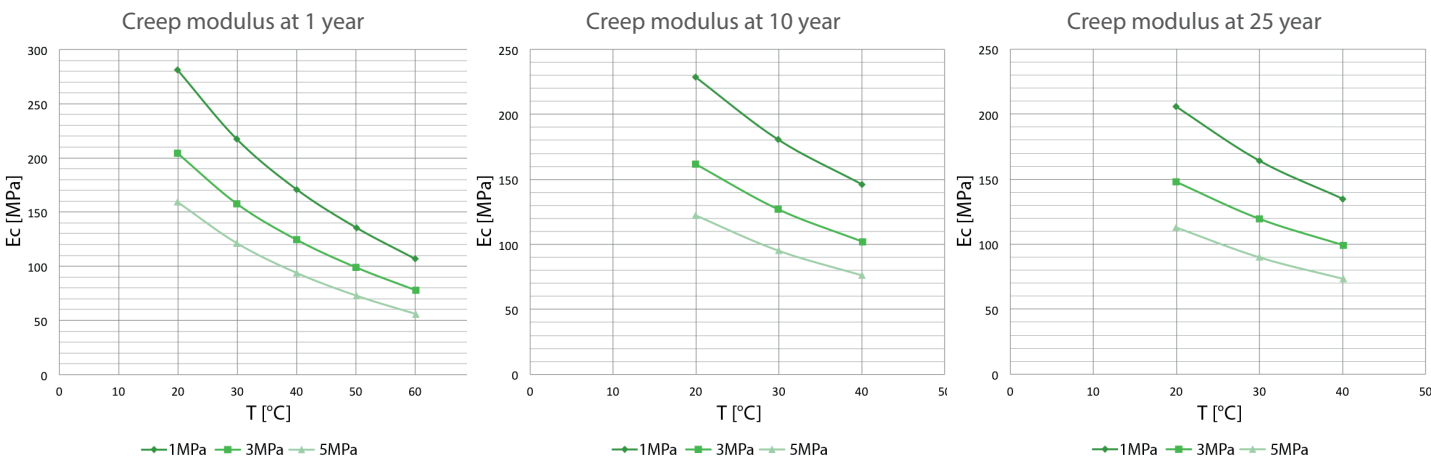
Paneltim® Technical Standard:  
See paragraphs 3.4.3.2.2 and 3.5.3.2.2

Equivalent thickness (t<sub>eq</sub>)

## Creep modulus (E<sub>c</sub>) for PP:



## Creep modulus (E<sub>c</sub>) for PE:



Paneltim®panel	Material	t <sub>eq</sub> (mm)	
		Flat	Upright
Multipower 50 mm 50/50	PP Prime	38.69	
	HDPE Prime	39.12	
Antislip 50 mm 50/50	PP Prime	36.21	
Lightweight 50 mm 50/100	PP Prime	36.67	36.19
	HDPE Prime	36.93	36.46
Lightweight 35 mm 50/100	PP Prime	28.01	27.78
	HDPE Prime	28.20	27.98
Lightweight 20 mm 50/100	PP Prime	18.08	18.02
	HDPE Prime	18.17	18.12

### CRITERIA FOR THE PANELS:

The deflection must be smaller than half of the equivalent thickness.

$$f < t_{eq} / 2$$

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