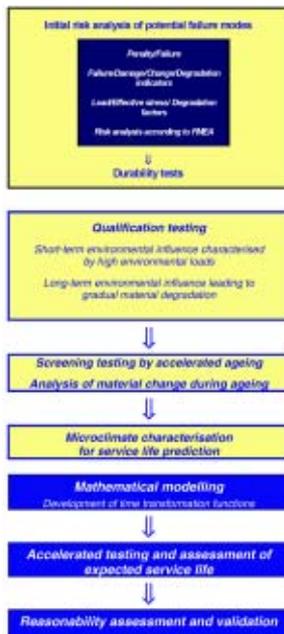


# Testing methodology for service life prediction of solar building facade components

To achieve successful and sustainable commercialisation, building products have to meet three important criteria: minimum cost, satisfactory performance and demonstrated durability.

Durability assessment directly addresses all three segments of this triad and allows analysis of life cycle costs by providing estimates of service lifetime, O&M costs and realistic warranties.

Task 27, within the IEA Solar Heating and Cooling Programme, has the objective of developing and applying appropriate methods to assess the durability of advanced components for solar building facades. A general methodology is developed and applied to different advanced building facade products like smart windows (switchable transmission), insulating glazing units, heat-reflecting wall paint, polymer glazing materials, anti-reflective glazing materials, etc., following the scheme in the figure.



Flow diagram of the life testing methodology:  
 1st Part: Initial risk analysis  
 2nd Part: Screening testing  
 3rd Part: Accelerated life testing



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