



COMPARATIVE REVIEW

Dynamic Shading Solutions for Buildings

13 criteria to help you in your decision-making process



	External shading (with low-e glazing)		High selective solar control glazing with internal shading		Double skin façade (passive ventilation, with integrated shading)		Dynamic glazing – electrochromic technology (does not require additional shading)		Dynamic glazing – liquid crystal technology (does not require additional shading)	
	Open	Closed	Open	Closed	Open	Closed	Bright state	Dark state	Bright state	Dark state
Glare control	×	★★★★★	★☆☆☆☆	★★★★★	×	★★★★★	★☆☆☆☆	★★★★★	★☆☆☆☆	★★★★★
Natural light transmission	★★★★★	×	★★★★★	×	★★★★★	×	★★★★☆	★☆☆☆☆	★★★★☆	★☆☆☆☆
Neutrality of the transmitted colour	Depends on the glass used in the glazing, colour neutral blinds/screens have no impact on the transmitted colour						★★★★☆	★☆☆☆☆	★★★★★	★★★★★
Unobstructed view to the outside	★★★★★	×	★★★★★	×	★★★★★	×	★★★★★	★★★★★	★★★★★	★★★★★
Solar control	×	★★★★★	★★★★☆	★★★★☆	★★★☆☆	★★★★★	★★★☆☆	★★★★★	★★★☆☆	★★★★☆
Switching time	 A few seconds		 A few seconds		 A few seconds		 Up to 15 minutes		 < 1 second	
Sizes available	★★★★☆		★★★★★		★★★★★		★★★☆☆		★★★★★	

× NON-EXISTENT
 ★☆☆☆☆ LOW
 ★★☆☆☆ MIDDLE
 ★★★☆☆ GOOD
 ★★★★★ VERY GOOD

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Possibility to implement complex shapes (polygons, triangles, etc.)	Very difficult External shading does not allow much flexibility		Difficult Internal blinds or curtains offer more possibilities than external shading systems		Very difficult Integrated shading does not allow much flexibility		Very difficult Technological restrictions		The technology allows various possibilities	
Energy consumption of the shading system	★☆☆☆☆		★☆☆☆☆		★☆☆☆☆		★★★★★		★★★★★	
Aesthetic uniformity of the façade	Very low		From low to medium depending on the light reflection of the solar control glass used and its ability to make the shading less visible		Medium		Very high			
Ease of cleaning	★☆☆☆☆		★★★★★		★☆☆☆☆		★★★★★		★★★★★	
Maintenance requirements	High		Low		High		Low		Low	
Specific conditions that prevent proper functioning	Strong wind loads		✗		✗		High temperatures		✗	

✗ NON-EXISTENT ★☆☆☆☆ LOW ★★☆☆☆ MIDDLE ★★★☆☆ GOOD ★★★★★ VERY GOOD

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