



# GUARDIAN SUN-GUARD® HIGH PERFORMANCE LE 63 / LE 50 / LE 40

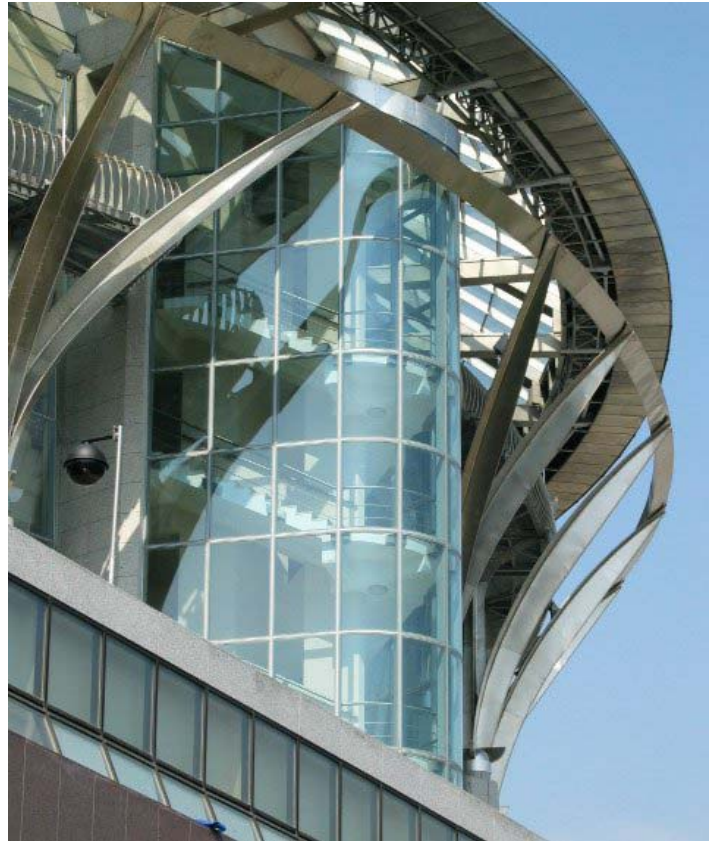
**SUN-GUARD® HP LE** Series of products are silver-based Low-E coated products that offer the benefits of **Low-E** performance coupled with the **flexibility for fabrication** and **solar control** performance of **SUN-GUARD®**.



UW Engineering Center, Madison WI  
SUN-GUARD® High Performance LE 40 clear



Al-Jimi Commercial Center, Al Ain / UAE  
SUN-GUARD® High Performance LE 63 green



Music Hall, Moscow  
SUN-GUARD® High Performance LE 63 clear

## Key Features

- Heat treatable / Bendable
- Uniform neutral colour
- Enhanced thermal insulation (U-value up to 1,4 W/m<sup>2</sup>K)
- Enhanced selectivity (light-to-solar factor ratio)
- Short lead times
- Long shelf life
- Application in insulated glass units only



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## Product Performance Data

Product	Visible Light			Solar Energy			Solar Factor		Shading Coeff. *	U-Value	
	Transmission [%]	Reflection Outdoors [%]	Reflection Indoors [%]	Direct Transmission [%]	Direct Reflection Outdoors [%]	Absorption [%]	EN 410 [%]	DIN 67 507 [%]		Air [W/(m²K)]	Argon [W/(m²K)]

<b>Double Glazing Performance Data</b>	<b>6-16-4, Coating on surface #2</b>
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LE 63 clear	<b>62</b>	16	11	48	17	35	<b>52</b>	51	0,60	1,7	1,5
LE 63 green	<b>50</b>	12	11	27	8	65	<b>32</b>	30	0,37	1,7	1,5
LE 50 clear	<b>52</b>	18	10	38	21	41	<b>41</b>	41	0,47	1,6	1,4
LE 50 green	<b>42</b>	13	10	22	9	69	<b>27</b>	25	0,31	1,6	1,4
LE 40 clear	<b>41</b>	22	12	29	24	47	<b>33</b>	32	0,38	1,6	1,4
LE 40 green	<b>33</b>	16	12	17	10	73	<b>22</b>	21	0,25	1,6	1,4

<b>Double Glazing – Low-E Enhanced Performance Data</b>	<b>6-16-4, Coating on surface #2, GUARDIAN Low-E 1.1 N on surface #3</b>
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LE 63 clear	<b>59</b>	14	8	40	19	41	<b>47</b>	45	0,54	1,4	1,1
LE 63 green	<b>48</b>	11	7	24	8	68	<b>30</b>	28	0,34	1,4	1,1
LE 50 clear	<b>49</b>	17	7	32	22	46	<b>38</b>	37	0,44	1,4	1,1
LE 50 green	<b>40</b>	12	7	19	9	72	<b>25</b>	24	0,29	1,4	1,1
LE 40 clear	<b>39</b>	21	8	25	25	50	<b>31</b>	30	0,36	1,4	1,1
LE 40 green	<b>32</b>	15	8	15	10	75	<b>21</b>	19	0,24	1,4	1,1

All values subject to product tolerances and are without any guarantee.  
 Spectrophotometrical values according to EN 410; U-values according to EN 673 (15 K).  
 \* Solar Factor (EN 410) / 0,87

