

# Technical Data Sheets and Specifications

## 3M™ Flat Glass Window Film – Single Pane ¼” (6mm) Clear

Film	SHGC	VLT	Visible Reflection Exterior	Visible Reflection Interior	U Value	LSG (Light to Solar Gain)	UV Block	SC	TSER	Glare Reduction	Heat Loss Reduction	Heat Gain Reduction
1/4" Clear	0.82	89%	8%	9%	1.03	1.1	38%	0.94	19%	NA	NA	NA
Thinsulate CC75	0.53	74%	15%	12%	0.62	1.4	99.9%	0.61	47%	17%	40%	35%
PR40	0.40	39%	7%	7%	0.99	1.0	99.9%	0.46	60%	55%	3%	50%
PR50	0.44	50%	8%	7%	0.99	1.1	99.9%	0.50	56%	44%	3%	46%
PR60	0.47	60%	8%	8%	0.99	1.3	99.9%	0.54	53%	32%	3%	42%
PR70	0.50	69%	9%	9%	0.99	1.4	99.9%	0.58	50%	22%	3%	38%
CM30	0.41	36%	17%	15%	1.02	0.9	99%	0.47	59%	60%	0%	50%
CM40	0.47	44%	14%	12%	1.03	0.9	99%	0.54	53%	50%	0%	43%
CM50	0.53	53%	12%	10%	1.03	1.0	99%	0.61	47%	40%	0%	35%
NV15	0.28	15%	38%	11%	0.98	0.5	99%	0.32	72%	83%	4%	66%
NV25	0.39	24%	19%	7%	1.00	0.6	99%	0.45	61%	73%	2%	52%
NV35	0.48	36%	13%	7%	1.03	0.7	99%	0.55	52%	59%	0%	41%
P18	0.23	17%	56%	58%	0.93	0.7	99%	0.26	77%	81%	9%	72%
Neutral 20	0.38	15%	21%	19%	0.99	0.4	99%	0.44	62%	83%	3%	53%
Neutral 35	0.44	36%	20%	18%	0.99	0.8	99%	0.51	56%	60%	4%	46%
Neutral 50	0.56	52%	12%	11%	1.03	0.9	98%	0.64	44%	41%	0%	31%
Neutral 70	0.68	69%	9%	8%	1.03	1.0	98%	0.78	32%	22%	0%	17%
Silver 35	0.36	35%	36%	40%	0.92	1.0	98%	0.41	64%	60%	10%	56%
Nickel 50	0.44	50%	24%	23%	0.92	1.1	99%	0.50	56%	44%	10%	46%
Affinity 15	0.21	9%	58%	25%	1.00	0.4	99%	0.24	79%	90%	2%	74%
Affinity 30	0.39	33%	29%	19%	0.94	0.8	99%	0.45	61%	63%	8%	52%
LE35	0.25	30%	54%	60%	0.85	1.2	99%	0.29	75%	67%	17%	69%
Ultra Prestige S50	0.44	48%	9%	7%	1.02	1.1	99.9%	0.50	56%	46%	1%	46%
Ultra Prestige S70	0.51	68%	10%	9%	1.02	1.4	99.9%	0.58	50%	23%	1%	38%
Ultra Night Vision S25	0.40	24%	19%	7%	1.02	0.6	99.9%	0.46	60%	73%	1%	51%
Safety Neutral S35	0.43	39%	23%	13%	1.02	0.9	99%	0.54	57%	56%	0%	47%
Safety Silver S20	0.25	18%	61%	62%	1.02	0.7	99%	0.26	76%	80%	0%	70%
Scotchshield Ultra S600	0.79	87%	9%	9%	1.02	1.1	99.9%	0.91	21%	2%	0%	3%
Scotchshield Ultra S800	0.79	87%	9%	9%	1.04	1.1	99.9%	0.90	21%	2%	0%	3%
Safety S40	0.82	87%	8%	8%	1.03	1.1	99%	0.94	19%	2%	0%	0%
Safety S70	0.79	87%	9%	9%	1.02	1.1	99%	0.91	21%	2%	0%	3%
Safety S80	0.79	87%	9%	9%	1.03	1.1	99%	0.90	21%	2%	0%	3%
Safety S140	0.78	85%	10%	10%	1.03	1.1	99%	0.90	22%	4%	0%	4%
Silver 15 External	0.19	17%	61%	56%	1.02	0.9	99%	0.22	81%	81%	0%	77%
Safety S20 Exterior	0.80	88%	9%	9%	1.02	1.1	99.9%	0.92	20%	0%	1%	2%
Safety S40 Exterior	0.80	89%	9%	9%	1.02	1.1	99.9%	0.92	20%	0%	0%	2%
Safety S70 Exterior	0.79	88%	8%	8%	1.02	1.1	99.9%	0.91	21%	0%	0%	3%
Neutral 35 External	0.49	44%	10%	13%	1.02	0.9	99%	0.56	51%	50%	0%	40%
PR40X	0.39	42%	6%	5%	1.02	1.1	99.9%	0.44	61%	53%	0%	53%
PR70X	0.48	71%	7%	7%	1.02	1.5	99.9%	0.55	52%	20%	0%	41%
PR90X	0.64	88%	9%	9%	1.02	1.4	99.9%	0.74	36%	1%	0%	21%
Anti Graffiti 4 & 6	N/A	N/A	N/A	N/A	N/A	N/A	99.9%	N/A	N/A	N/A	N/A	N/A
SWF 4 & 7	N/A	N/A	N/A	N/A	N/A	N/A	99%	N/A	N/A	N/A	N/A	N/A

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3

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# Technical Data Sheets and Specifications

## 3M™ Flat Glass Window Film – Single Pane ¼” (6mm) Tinted Glass

Film	SHGC	VLT	Visible Reflection Exterior	Visible Reflection Interior	U Value	LSG (Light to Solar Gain)	UV Block	SC	TSER	Glare Reduction	Heat Loss Reduction	Heat Gain Reduction
1/4" tint	0.63	53%	6%	6%	1.03	0.8	NA	0.72	37%	NA	NA	NA
Thinsulate CC75	0.40	44%	8%	10%	0.62	1.1	99.9%	0.46	60%	17%	40%	37%
PR40	0.37	24%	5%	6%	0.99	0.6	99.9%	0.42	63%	55%	3%	41%
PR50	0.39	30%	6%	6%	0.99	0.8	99.9%	0.45	61%	43%	3%	38%
PR60	0.41	36%	6%	7%	0.99	0.9	99.9%	0.47	59%	32%	3%	34%
PR70	0.43	42%	6%	7%	0.99	1.0	99.9%	0.50	57%	22%	3%	31%
CM30	0.38	21%	9%	15%	1.02	0.6	99%	0.43	63%	60%	0%	40%
CM40	0.41	27%	8%	11%	1.03	0.6	99%	0.47	59%	50%	0%	34%
CM50	0.45	32%	7%	9%	1.03	0.7	99%	0.52	55%	40%	0%	28%
NV15	0.30	9%	16%	11%	0.98	0.3	99%	0.34	70%	82%	4%	52%
NV25	0.36	14%	10%	7%	1.00	0.4	99%	0.41	64%	74%	2%	43%
NV35	0.42	22%	8%	6%	1.03	0.5	99%	0.48	58%	58%	0%	33%
P18	0.27	10%	23%	58%	0.93	0.4	99%	0.30	74%	82%	9%	58%
Neutral 20	0.32	9%	10%	19%	0.99	0.3	99%	0.37	68%	83%	3%	49%
Neutral 35	0.39	21%	10%	18%	0.99	0.5	99%	0.45	61%	60%	4%	38%
Neutral 50	0.47	31%	7%	10%	1.03	0.7	99%	0.54	53%	41%	0%	25%
Neutral 70	0.55	42%	6%	7%	1.03	0.8	99%	0.63	45%	22%	0%	13%
Silver 35	0.34	21%	16%	40%	0.92	0.6	99%	0.39	66%	61%	10%	46%
Nickel 50	0.38	30%	12%	22%	0.92	0.8	99%	0.44	62%	44%	10%	39%
Affinity 15	0.27	5%	24%	25%	1.00	0.2	99%	0.31	73%	91%	2%	57%
Affinity 30	0.37	20%	14%	19%	0.94	0.5	99%	0.43	63%	62%	8%	41%
LE35	0.27	17%	22%	60%	0.85	0.7	99%	0.31	73%	67%	17%	57%
Ultra Prestige S50	0.40	29%	6%	7%	1.02	0.7	99.9%	0.46	60%	45%	1%	37%
Ultra Prestige S70	0.44	41%	6%	8%	1.02	0.9	99.9%	0.51	56%	23%	1%	30%
Ultra Night Vision S25	0.38	15%	10%	7%	1.02	0.4	99.9%	0.43	62%	73%	1%	40%
Safety Neutral S35	0.36	23%	22%	8%	1.02	0.6	99%	0.48	64%	56%	0%	42%
Safety Silver S20	0.30	11%	25%	62%	1.02	0.4	99%	0.33	71%	80%	0%	53%
Scotchshield Ultra S600	0.62	53%	6%	6%	1.02	0.8	99.9%	0.71	38%	1%	0%	1%
Scotchshield Ultra S800	0.62	52%	6%	7%	1.02	0.8	99.9%	0.71	38%	1%	0%	2%
Safety S40	0.62	53%	6%	6%	1.02	0.8	99%	0.71	38%	1%	0%	1%
Safety S70	0.62	53%	6%	6%	1.02	0.8	99%	0.71	38%	1%	0%	1%
Safety S80	0.62	52%	6%	7%	1.02	0.8	99%	0.71	38%	1%	0%	2%
Safety S140	0.62	52%	6%	7%	1.02	0.8	99%	0.71	38%	1%	0%	2%
Silver 15 External	0.16	10%	61%	23%	1.02	0.6	99%	0.18	84%	82%	0%	75%
Safety S20 Exterior	0.62	53%	6%	6%	1.02	0.9	99.9%	0.72	38%	0%	0%	1%
Safety S40 Exterior	0.62	53%	6%	6%	1.02	0.9	99.9%	0.72	38%	0%	0%	1%
Safety S70 Exterior	0.62	53%	6%	6%	1.02	0.9	99.9%	0.71	38%	0%	0%	2%
Neutral 35 External	0.41	27%	10%	8%	1.02	0.6	99%	0.47	59%	50%	0%	34%
PR40X	0.33	25%	5%	5%	1.02	0.8	99.9%	0.38	67%	53%	0%	47%
PR70X	0.39	42%	6%	5%	1.02	1.1	99.9%	0.44	61%	20%	0%	39%
PR90X	0.50	53%	6%	6%	1.02	1.1	99.9%	0.57	50%	1%	0%	21%
Anti Graffiti 4 & 6	N/A	N/A	N/A	N/A	N/A	N/A	99%	N/A	N/A	N/A	N/A	N/A
SWF 4 & 7	N/A	N/A	N/A	N/A	N/A	N/A	99%	N/A	N/A	N/A	N/A	N/A

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# Technical Data Sheets and Specifications

## 3M™ Flat Glass Window Film – Double Pane ¼” (6mm) Clear Glass

Film	SHGC	VLT	Visible Reflection Exterior	Visible Reflection Interior	U Value	LSG (Light to Solar Gain)	UV Block	SC	TSER	Glare Reduction	Heat Loss Reduction	Heat Gain Reduction
Dual 1/4" Clear	0.70	79%	15%	15%	0.47	1.1	NA	0.80	30%	NA	NA	NA
Thinsulate CC75	0.51	66%	21%	17%	0.35	1.3	99.9%	0.58	49%	16%	26%	27%
PR40	0.51	35%	14%	8%	0.47	0.7	99.9%	0.59	49%	55%	2%	27%
PR50	0.53	45%	15%	9%	0.47	0.8	99.9%	0.61	47%	44%	2%	25%
PR60	0.54	54%	15%	11%	0.47	1.0	99.9%	0.62	46%	32%	2%	22%
PR70	0.56	62%	15%	13%	0.47	1.1	99.9%	0.64	44%	22%	2%	21%
CM30	0.50	32%	22%	16%	0.47	0.6	99%	0.58	50%	60%	1%	28%
CM40	0.54	40%	20%	14%	0.47	0.7	99%	0.62	46%	50%	1%	23%
CM50	0.57	47%	18%	12%	0.47	0.8	99%	0.66	43%	40%	1%	18%
NV15	0.40	14%	39%	11%	0.46	0.4	99%	0.46	60%	82%	3%	43%
NV25	0.49	22%	24%	8%	0.47	0.4	99%	0.57	51%	72%	1%	29%
NV35	0.55	32%	19%	8%	0.47	0.6	99%	0.64	45%	60%	1%	21%
P18	0.33	15%	55%	58%	0.45	0.5	99%	0.37	67%	80%	5%	53%
Neutral 20	0.46	14%	25%	19%	0.47	0.3	99%	0.53	54%	83%	2%	34%
Neutral 35	0.51	32%	24%	19%	0.46	0.6	99%	0.59	49%	60%	2%	27%
Neutral 50	0.59	46%	18%	13%	0.48	0.8	99%	0.67	41%	41%	0%	16%
Neutral 70	0.64	62%	16%	12%	0.48	1.0	99%	0.74	36%	22%	0%	8%
Silver 35	0.43	32%	38%	41%	0.45	0.7	99%	0.49	57%	59%	6%	39%
Nickel 50	0.48	45%	28%	25%	0.45	0.9	99%	0.55	52%	43%	6%	31%
Affinity 15	0.32	8%	57%	26%	0.47	0.3	99%	0.37	68%	90%	1%	54%
Affinity 30	0.46	30%	32%	20%	0.45	0.7	99%	0.53	54%	62%	5%	34%
LE35	0.32	28%	53%	61%	0.42	0.8	99%	0.37	68%	65%	11%	54%
Ultra Prestige S50	0.53	43%	15%	9%	0.47	0.8	99.9%	0.61	47%	46%	0%	25%
Ultra Prestige S70	0.56	61%	16%	13%	0.47	1.1	99.9%	0.64	44%	23%	1%	20%
Ultra Night Vision S25	0.50	22%	24%	8%	0.47	0.4	99.9%	0.58	50%	73%	0%	28%
Safety Neutral S35	0.49	35%	27%	14%	0.47	0.7	99%	.63	51%	55%	1%	30%
Safety Silver S20	0.33	17%	59%	62%	0.47	0.5	99%	0.37	67%	79%	0%	53%
Scotchshield Ultra S600	0.69	78%	16%	16%	0.48	1.1	99.9%	0.79	31%	2%	0%	1%
Scotchshield Ultra S800	0.69	77%	16%	16%	0.48	1.1	99.9%	0.79	31%	2%	0%	2%
Safety S40	0.68	77%	15%	15%	0.47	1.1	99%	0.78	32%	3%	0%	3%
Safety S70	0.68	77%	16%	16%	0.47	1.1	99%	0.78	32%	3%	0%	3%
Safety S80	0.68	77%	16%	16%	0.47	1.1	99%	0.78	32%	3%	0%	3%
Safety S140	0.68	72%	16%	16%	0.47	1.1	99%	0.78	32%	9%	0%	3%
Silver 15 External	0.14	15%	61%	54%	0.47	1.1	99%	0.17	86%	81%	0%	79%
Safety S20 Exterior	0.69	79%	15%	15%	0.47	1.1	99.9%	0.79	31%	0%	0%	2%
Safety S40 Exterior	0.68	79%	15%	15%	0.47	1.2	99.9%	0.78	32%	0%	0%	3%
Safety S70 Exterior	0.68	79%	15%	15%	0.47	1.2	99.9%	0.78	32%	0%	0%	3%
Neutral 35 External	0.38	40%	12%	18%	0.47	1.1	99%	0.43	62%	50%	0%	46%
PR40X	0.29	37%	7%	13%	0.47	1.3	99.9%	0.33	71%	53%	1%	59%
PR70X	0.39	63%	12%	14%	0.47	1.6	99.9%	0.44	61%	20%	0%	45%
PR90X	0.56	78%	15%	16%	0.47	1.4	99.9%	0.64	45%	1%	1%	21%
Anti Graffiti 4 & 6	N/A	N/A	N/A	N/A	N/A	N/A	99%	N/A	N/A	N/A	N/A	N/A
SWF 4 & 7	N/A	N/A	N/A	N/A	N/A	N/A	99%	N/A	N/A	N/A	N/A	N/A

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# Technical Data Sheets and Specifications

## 3M™ Flat Glass Window Film – Double Pane ¼” (6mm) Tinted Glass

Film	SHGC	VLT	Visible Reflection Exterior	Visible Reflection Interior	U Value	LSG (Light to Solar Gain)	UV Block	SC	TSER	Glare Reduction	Heat Loss Reduction	Heat Gain Reduction
Dual 1/4" tint	0.51	47%	8%	13%	0.47	0.9	NA	0.58	49%	NA	NA	NA
Thinsulate CC75	0.37	40%	10%	15%	0.35	1.1	99.9%	0.42	63%	15%	26%	27%
PR40	0.39	21%	8%	8%	0.47	0.5	99.9%	0.45	61%	55%	2%	23%
PR50	0.40	27%	8%	9%	0.47	0.7	99.9%	0.46	60%	44%	2%	22%
PR60	0.41	32%	8%	10%	0.47	0.8	99.9%	0.47	59%	32%	2%	20%
PR70	0.42	37%	8%	12%	0.47	0.9	99.9%	0.48	59%	22%	2%	18%
CM30	0.38	19%	11%	16%	0.47	0.5	99%	0.44	62%	60%	1%	25%
CM40	0.40	24%	10%	13%	0.47	0.6	99%	0.46	60%	50%	1%	21%
CM50	0.43	28%	9%	11%	0.47	0.7	99%	0.49	58%	40%	1%	16%
NV15	0.32	8%	17%	11%	0.46	0.3	99%	0.37	68%	83%	3%	37%
NV25	0.37	13%	12%	8%	0.47	0.4	99%	0.43	63%	73%	1%	27%
NV35	0.41	19%	10%	7%	0.47	0.5	99%	0.47	59%	60%	1%	19%
P18	0.27	9%	23%	58%	0.45	0.3	99%	0.31	73%	81%	5%	47%
Neutral 20	0.36	8%	12%	19%	0.47	0.2	99%	0.41	64%	83%	2%	30%
Neutral 35	0.39	19%	12%	19%	0.46	0.5	99%	0.45	61%	60%	2%	23%
Neutral 50	0.44	28%	10%	13%	0.48	0.6	99%	0.50	57%	41%	0%	14%
Neutral 70	0.47	37%	9%	11%	0.48	0.8	99%	0.54	53%	22%	0%	7%
Silver 35	0.33	19%	16%	41%	0.45	0.6	99%	0.38	67%	60%	6%	34%
Nickel 50	0.36	27%	13%	24%	0.45	0.7	99%	0.42	64%	43%	6%	28%
Affinity 15	0.27	5%	23%	25%	0.47	0.2	99%	0.31	73%	89%	1%	47%
Affinity 30	0.36	18%	15%	20%	0.45	0.5	99%	0.41	64%	62%	5%	29%
LE35	0.26	16%	22%	61%	0.42	0.6	99%	0.30	74%	66%	11%	48%
Ultra Prestige S50	0.40	26%	9%	9%	0.47	0.6	99.9%	0.46	60%	46%	0%	21%
Ultra Prestige S70	0.42	37%	9%	12%	0.47	0.9	99.9%	0.48	58%	23%	0%	17%
Ultra Night Vision S25	0.38	13%	11%	8%	0.47	0.3	99.9%	0.44	62%	73%	0%	24%
Safety Neutral S35	0.38	21%	13%	14%	0.47	0.6	99%	0.47	62%	56%	0%	25%
Safety Silver S20	0.28	10%	24%	62%	0.47	0.4	99%	0.31	72%	79%	0%	45%
Scotchshield Ultra S600	0.5	47%	9%	14%	0.48	0.9	99.9%	0.58	50%	2%	0%	1%
Scotchshield Ultra S800	0.5	46%	9%	14%	0.48	0.9	99%	0.58	50%	2%	0%	1%
Safety S40	0.5	47%	9%	14%	0.48	0.9	99%	0.58	50%	2%	0%	1%
Safety S70	0.5	47%	9%	14%	0.48	0.9	99%	0.58	50%	2%	0%	1%
Safety S80	0.5	46%	9%	14%	0.48	0.9	99%	0.58	50%	2%	0%	1%
Safety S140	0.5	46%	9%	14%	0.48	0.9	99%	0.58	50%	2%	0%	1%
Silver 15 External	0.11	9%	61%	27%	0.47	0.8	99%	0.13	89%	81%	0%	78%
Safety S20 Exterior	0.5	47%	8%	13%	0.47	0.9	99.9%	0.57	50%	0%	0%	2%
Safety S40 Exterior	0.5	47%	8%	13%	0.47	0.9	99.9%	0.57	50%	0%	0%	2%
Safety S70 Exterior	0.5	47%	8%	13%	0.47	1.0	99.9%	0.57	51%	1%	0%	2%
Neutral 35 External	0.29	24%	10%	14%	0.47	0.8	99%	0.34	71%	50%	0%	42%
PR40X	0.23	22%	6%	12%	0.47	1.0	99.9%	0.26	77%	53%	0%	55%
PR70X	0.29	38%	7%	13%	0.47	1.3	99.9%	0.33	71%	21%	0%	43%
PR90X	0.41	47%	9%	13%	0.47	1.2	99.9%	0.47	60%	1%	0%	20%
Anti Graffiti 4 & 6	N/A	N/A	N/A	N/A	N/A	N/A	99%	N/A	N/A	N/A	N/A	N/A
SWF 4 & 7	N/A	N/A	N/A	N/A	N/A	N/A	99%	N/A	N/A	N/A	N/A	N/A

The information provided in this report is believed to be reliable; however, due to the wide variety of intervening factors, 3M does not warrant that the results will necessarily be obtained. All details concerning product specifications and terms of sale are available from 3M.

3

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