#16,700

Hunt County Courthouse Window Mock-UP

Below is the work scope and cost for the window mock up using the Huper Optik Ceramic window film. The full scope will take 14 days to complete. Pricing includes all labor and materials.

Metals

- A). STEEL LINTEL REPAIR AND REPAINTING
 - 1) Strip steel lintels in place to remove existing paint.
 - 2) Wire brush to remove all rust
 - 3) Treat bare lintels with Ospho rust prohibitor
 - 4) Prime and repaint. Color to match windows

Joint Sealants

- A). Removal of existing joint sealants
 - 1) Remove all existing joint sealants from perimeter of jamb
 - 2) Clean existing sealants form masonry opening
 - 3) Apply new NP1 joint sealant (color to be chosen by architect)

Window Frame and Sashes

- A). Stripping of existing frame and sashes
 - 1) Remove all existing paint coatings with chemical stripped
 - 2) Wire brush to remove surface rust
 - 3) Make repairs to unsound steel
 - 4) Treat bare steel with Ospho rust prohibitor (interior & exterior)
 - 5) Prep for new glass
- B). Painting of restored frame and sashes and glass installation
 - 1) Prime with Sherwin Williams Kem Kromik Universal Metal Primer (2 Coats)
 - 2) Install new 1/4" clear tempered glass using clear silicone
 - 3) Final Paint with Sherwin Williams Sher-Cryl HPA High performance Acrylic (2 coats of Gloss)
 - 4) Final Clean all window components
 - 5) Install Huber Optik Ceramic 70 Interior window film

Total Cost \$ 8,475.00

Respectfully Submitted,

Chad Woody

TWR Construction Services



Ceramic Specifications

Product	Name	C5	C15	C20	C30	C35	C40	C45	C50	C60	C70	C85
VLT	Single	6%	15%	21%	30%	34%	42%	44%	50%	60%	71%	85%
	Dual	N/A	N/A	N/A	29%	31%	39%	42%	48%	58%	62%	N/A
VLR	Single	14%	17%	14%	11%	15%	9%	13%	10%	9%	10%	8%
	Dual	N/A	N/A	N/A	12%	16%	12%	14%	11%	11%	14%	N/A
SC	Single	0.30	0.32	0.37	0.43	0.45	0.52	0.53	0.58	0.65	0.60	0.79
	Dual	N/A	N/A	N/A	0.56	0.58	0.61	0.62	0.65	0.72	0.68	N/A
SHGC	Single	0.25	0.27	0.32	0.37	0.39	0.45	0.46	0.50	0.57	0.52	0.68
	Dual	N/A	N/A	N/A	0.49	0.50	0.53	0.54	0.56	0.63	0.59	N/A
IR Rej	Single	92%	96%	91%	86%	81%	80%	76%	68%	60%	88%	42%
	Dual	N/A	N/A	N/A	86%	81%	80%	76%	68%	60%	88%	N/A
UV Rej	Single	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%
	Dual	N/A	N/A	N/A	99%	99%	99%	99%	99%	99%	99%	N/A%
TSER	Single	75%	73%	68%	63%	61%	55%	54%	50%	43%	48%	32%
	Dual	N/A	N/A	N/A	51%	50%	47%	46%	44%	37%	41%	N/A
Glare Red	Single	93%	84%	76%	62%	61%	53%	51%	45%	34%	21%	4%
	Dual	N/A	N/A	N/A	64%	64%	59%	53%	47%	36%	22%	N/A
U-val	Single	1.01	1.01	1.01	1.04	1.03	1.06	1.06	1.02	1.04	1.04	0.99
	Dual	N/A	N/A	N/A	0.47	0.48	0.49	0.48	0.46	0.49	0.48	N/A

VLT - Visible Light Transmissison

VLR - Visible Light Reflection

SC - Shading Coefficient

SHGC - Solar Heat Gain Coefficient

IR Rej - Infrared Rejection

UV Rej - Ultraviolet Rejection

TSER - Total Solar Energy Rejected

Glare Red - Glare Reduction

U-val - U-value

Performance data is based on this film being applied to the inside of 3mm clear glass. All data calculated using the definitions and equations in ISO9050 & ASHRAE Handbook. The data is subject to variations within industry standards. Copyright © 2010 Huper Optik® USA (www.huperoptikusa.com) 5821 W. Sam Houston Pkwy. N., Ste. 400, Houston, TX 77041 Phone: 888-296-3456; Fax: 832-467-1190, info@huperoptikusa.com