SCOPE OF WORK

Door & Window Laminated Security Film

Lakewood City School District (LCSD) is seeking competitive bids for the purchase and installation of Door & Window Laminated Security Film for a total of 12 facilities throughout Lakewood, Ohio.

Project Estimate: \$314,000.00

- Lakewood City School District desires a 100% turnkey purchase and installation of Laminated Security Film for doors and windows in the entrance areas as detailed on "LCSD Window Square Footage by Building."
- 2. Bids submitted by vendors must include 100% all parts, materials, labor, installation and delivery costs. In addition, any staff training or informative information must be included in the price (if necessary).
- 3. Laminate film shall provide a clean finished look that does not hinder views. Installation must be free from bubbles, contamination, creases or other visual imperfections in the film or on the glass when installed. The project must also include the installation of an attachment / anchoring system per the manufacturer's instruction on all sides of the glass and on all sides of the frame. All locations where attachment is feasible the glazing color must be black, brown, grey, or white to match as closely as possible to the present window frame color.
- 4. This document represents a request for unit pricing per school covering 100% cost of the labor, materials and installation cost required to install laminated door & window security film.
- 5. It shall be the awarded vendor's responsibility to obtain the final measurements at each school.

SPECIFICATIONS

Each pane of glass to receive both the interior and exterior film/laminate. All film/laminate to be structurally sealed to the frame.

• Minimum Security Laminate Requirements for Interior:

 Security Laminate shall be a minimum of 12 mil with the following mechanical properties: Ultimate Tensile Strength minimum 28,500 psi Break Strength minimum 336 lb./inch Elongation at Break minimum 125% Peel Strength minimum 7 lb. / inch

• Minimum Security Laminate Requirements for Exterior:

 Security Laminate shall be minimum of 7 mil with the following mechanical properties: Ultimate Tensile Strength minimum 26,000 psi Break Strength minimum 180 lb./inch Elongation at Break minimum 140% Peel Strength minimum 7 lb./inch

• Minimum Security Laminate Safety Accreditations:

- 3. Impact: EN356 P2A DIN 52290 Part 4 A1
- 4. Wind Debris: ASTM E330, TAS 201, 202, 203 Florida Building Code (Dade County Small Missile Test)
- 5. Hurricane; Bomb blasé, Siach Gefen IDF Testing, UL 972 Burglary Resisting Glazing Material, GSA Level D (4psi, 30 psi/msec)
- 6. Impact EN 12600 Class 1B1

• Minimum Structural Sealant Requirements:

One part, neutral-cure, elastomeric sealant;
ASTM C679, Curing Time;
ASTM C 639, Flow,
Working Time; ASTM 2240,
Durometer Hardness, Shore A; ASTM D412,
Ultimate Tensile Strength, 350 psi, MPa, 2.41;
ASTM D624, Tear Strength, die B 49 ppi;
ASTM C794 40 ppi;
ASTM C1135, Tensile at 25% Elongation, 43 psi;
ASTM C1135, Tensile at 50% Elongation, 65 psi;
Ultimate Tensile Strength, 170 psi, 1.17 MPa,
ASTM C719 Joint Movement Capability;
Federal Specification TT-S00210C (COM-NBS) Class A for silicon building sealant;
Federal Specification C-920 Type S, Grade NS, Class 50, Use NT, G and A.

• Minimum Structural Attachments Requirements:

ASTM Standard, F 1642-04, "Standard Test Method for Glazing and Glazing Systems Subject to Airblast Loadings" ASTM Book of ASTM Standards, Vol. 04.07, March 2004. 2 US General Services Administration (GSA), GSA-TS01-2003, "Standard Test Method for Glazing and Glazing Systems subject to Dynamic Overpressure Loadings," GSA Jan. 2003. 3 Department of Defense (DoD), Unified Facilities Criteria (UFC) UFC4-010-01, "DoD minimum Antiterrorism Standards for Buildings" DoD October 2003.

• Warranty Period:

Warranty shall be 15 years for all installed security laminates, structural sealants, and structural attachments including the installation.

- Vendor to provide a minimum of (3) references of projects completed in Ohio.
- The awarded bidder is responsible for the installer, the installer must be authorized by the manufacturer. The installer must have at least 5 years of experience and a professional knowledge of school building installations. Installer will be 100%responsible for cleaning and preparing all window surfaces prior to installation. Installer will not install products under environmental conditions (temperature, humidity, ventilation) outside of manufacturer's recommended limits. Before the release of payment is made, LCSD shall confirm that workmanship is consistent with the approved manufactures recommendations.
- **Care and Maintenance:** Instructions for Care and Maintenance provided at the conclusion of the project.

Lakewood City School District Projected Timetable:

Successful bidder is expected to be awarded the project early December 2023.

Available time frame for work is during Spring Break (3/11/2024 through 11/15/2024) and Summer Break (6/10/2024 through 8/12/2024).

Substantial completion by 8/12/2024.

Lakewood City School District Taft Center for Innovation 13701 Lake Avenue Lakewood, Ohio 44107

BID COVER SHEET Lakewood City School District **RFB # SF11272023 Door & Window Laminated Security Film**

This bid cover sheet must be attached as the first page of the submitted packet.

I,	(print name),	(title), verify that I have
	ons, conditions, and instructions and agree	to all therein.
COMPANY NAME:		
ADDRESS:		
PHONE		
NUMBER:		
EMAIL		

ADDRESS:

By signing and submitting this bid in a sealed envelope with Lakewood City School District, the bidder agrees to all of the specifications, terms, and conditions of the LCSD - RFB # SF11272023 document. If you find any of these terms unacceptable - please do not bid.

SIGNATURE:

PRINT NAME: _____ DATE: _____

After the successful bidder has received the Award Notice, said bidder must provide to Lakewood City School District the following items: A quote in contract format with Terms & Conditions and a Certificate of Liability Insurance listing Lakewood City Schools as an Additional Insured.

BID COVER SHEET Page 2 Lakewood City School District **RFB #SF11272023 Door & Window Laminated Security Film**

 COMPANY NAME:
 DATE:

Price must include full installation, parts, labor and materials for both sides of the glass using a minimum 12 mil for interior and minimum 7 mil for exterior of the door/window.

Location	Total
Emerson Elementary School	\$
Grant Elementary School	\$
Harrison Elementary School	\$
Hayes Elementary School	\$
Horace Mann Elementary School	\$
Lincoln Elementary School	\$
Roosevelt Elementary School	\$
Garfield Middle School	\$
Harding Middle School	\$
Lakewood High School	\$
Franklin School of Opportunity	\$
Taft Center for Innovation	\$
GRAND TOTAL:	\$

Does bid price include a minimum of 15-year warranty on all parts, labor, installation and materials ____Yes ____No

SECTION I – GENERAL TERMS AND CONDITIONS

- 1. The bid will be awarded based on pricing/cost and service as validated through references and other considerations as submitted through the RFB process. Award shall be made based on best or most responsive bid as determined to be in the best interest of LCSD. Our intent is to award bid to one lowest, best and most responsive competitive bidder.
- 2. LCSD is a tax-exempt organization.

SECTION II – OBLIGATIONS

The terms and conditions of this document shall be part of the contract. Lakewood City School District reserves the right to negotiate other terms and conditions with the awarded bidder if it deems appropriate and necessary.

- 1. INDEMNIFICATION/HOLD HARMLESS: The awarded bidder shall indemnify, defend, save and hold harmless Lakewood City School District, its officers, agents and employees from all suits, claims, actions or damages of any nature brought because of, arising out of, or due to breach of the agreement by Contractor, its subcontractors, suppliers, agents, or employees or due to any negligent act or occurrence or any omission or commission of Contractor, its subcontractors, suppliers, agents or employees.
- 2. The bidder shall abide by and comply with the true intent of the specifications and not take advantage of any unintentional error or omission but shall fully address the full intent and meaning of each aspect of the specifications.
- 3. The bidder shall be responsible to comply with all local, state, and federal laws, regulations, licensing, and other requirements as applicable. All bidders must provide evidence of current business license.
- 4. This bid is considered a 100% turnkey project, bid prices should reflect all materials, labor, installation delivery, freight costs and clean up. Awarded bidder is permitted to use the school districts dumpsters or trash disposal containers.

Location	Quantity	Width (inches)	Height (inches)	Square Feet Opening (W x H) / 144	Square Feet Total Qty x Sq Ft Opening
Emerson Elementary School	Quantity				aty x oq i t opening
Door 1 to include all surrounding glass at the entrance					
Interior, Doors	2	25	69	11.98	23.96
Interior, Sidelights, Middle	2	26	32	5.78	11.56
Interior, Sidelights, Lower	2	26	22	3.97	7.94
Door 2 windows (Service Drive)					
Entrance 2, Doors	2	26	33	5.96	11.92
Door 3 windows (Service Drive)					
Entrance 3, Doors	2	26	33	5.96	11.92
Door 4 (Clifton Blvd.) To include surrounding glass on side of doors					
Entrance 4, Doors	2	21	75	10.94	21.88
Entrance 4, Sidelights	2	20	72	10.00	20.00
Door 5 windows (Jackson Ave.)					
Entrance 5, Doors	2	26	33	5.96	11.92
Door 6 windows (Jackson Ave.)					
Entrance 6, Doors	1	26	64	11.56	11.56
Entrance 6, Sidelights	1	20	74	10.28	10.28
Door 7 windows to include lower two levels of glass on each side of door (Jackson Ave.)					
Entrance 7, Doors	1	26	64	11.56	11.56
Entrance 7, Sidelights, Middle	2	62	30	12.92	25.83
Entrance 7, Sidelights, Lower	2	62	25	10.76	21.53
ΤΟΤΑ	LS: 23				201.83
Grant Elementary School					
Door 1 (Main Entrance) to include surrounding windows of the Main Office					
Entrance 1, Doors	2	25	67	11.63	5.41
Entrance 1, Sidelights	4	33	65	14.90	6.72
Entrance 1, Sidelights	1	23	65	10.38	4.69
Door 2 windows (North side)					
Entrance 2, Doors	2	25	67	11.63	5.41
Door 8 windows to include all surrounding windows (east side)					
Entrance 8, Door	1	25	67	11.63	5.41
Entrance 8, Sidelights	8	22	84		
Entrance 8, Sidelights	2	34	84	19.83	11.57
Door 9 windows to include first level of all surrounding windows (east side)					
Entrance 9, Door	1	25	67	11.63	5.41
Entrance 9, Sidelights	8	24	66	11.00	5.04

Location	Quantity	Width (inches)	Height (inches)	Square Feet Opening (W x H) / 144	Square Feet Total Qty x Sq Ft Opening
Door 10 windows (east side)					
Entrance 10, Door	1	29	67	13.49	6.28
Door 11 windows (west side)					
Entrance 11, Door	1	29	67	13.49	6.28
LRC					
LRC, Windows	18	26.00	45.00	8.13	2.54
тот	ALS: 49				64.76
Harrison Elementary School					
Door 1 (Main Entrance) to include surrounding windows on each side of door					
Main Entrance, Doors, Upper	2	25	35	6.08	12.15
Main Entrance, Doors, Lower	2	25	29	5.03	10.07
Main Entrance, Sidelights, Upper	2	16	52	5.78	11.56
Main Entrance, Sidelights, Lower	2	16	26	2.89	5.78
Door 3 windows (Quail Ave.)					
Entrance 3, Doors, Upper	2	25	35	6.08	12.15
Entrance 3, Doors, Lower	2	25	29	5.03	10.07
Door 4 windows (Thrush Ave.)					
Entrance 4, Doors, Upper	2	25	35	6.08	12.15
Entrance 4, Doors, Lower	2	25	29	5.03	10.07
Door 5 windows (Thrush Ave.)					
Entrance 5, Doors, Upper	2	25	35	6.08	12.15
Entrance 5, Doors, Lower	2	25	29	5.03	10.07
Door 6 windows (Thrush Ave.)					
Entrance 6, Doors, Upper	2	25	35	6.08	12.15
Entrance 6, Doors, Lower	2	25	29	5.03	10.07
Door 7 windows (Thrush Ave.)					
Entrance 7, Doors, Upper	2	25	35	6.08	12.15
Entrance 7, Doors, Lower	2	25	29	5.03	10.07
Door 8 windows (Thrush Ave.)					
Entrance 8, Doors, Upper	6	25	35	6.08	36.46
Entrance 8, Doors, Lower	6	25	29	5.03	30.21
Door 10 (Dowd Ave.) to include lowest level windows of cafeteria					
Entrance 10, Windows/Cafe	8	25	50	8.68	69.44
Door 17 (gym entrance - Quail Ave.) to include glass on each side of doors					
Entrance 17, Doors, Upper	3	25	35	6.08	18.23
Entrance 17, Doors, Lower	3	25	29	5.03	15.10

Location	Quantity	Width (inches)	Height (inches)	Square Feet Opening (W x H) / 144	Square Feet Total Qty x Sq Ft Opening
Entrance 17, Sidelights, Upper	2	32	52	11.56	23.11
Entrance 17, Sidelights, Lower	2	32	26	5.78	11.56
Door 18 windows (Quail Ave.)					
Entrance 18, Doors, Upper	2	25	35	6.08	12.15
Entrance 18, Doors, Lower	2	25	29	5.03	10.07
τοτ	ALS: 62				377.00
Hayes Elementary School					
Door 1 (Main Entrance) to include three levels of glass on each side of doors					
Entrance 1, Doors, Upper	4	25	37	6.42	25.69
Entrance 1, Doors, Lower	4	25	26	4.51	18.06
Entrance 1, Sidelights, Middle	3	26	34	6.14	18.42
Entrance 1, Sidelights, Lower	3	26	27	4.88	14.63
Door 2 windows (Parking lot side)					
Entrance 2, Doors, Upper	6	25	37	6.42	38.54
Entrance 2, Doors, Lower	6	25	27	4.69	28.13
Door 3 windows (Parking lot side)					
Entrance 3, Doors, Upper	6	25	37	6.42	38.54
Entrance 3, Doors, Lower	6	25	27	4.69	28.13
Door 4 windows (Playground side)					
Entrance 4, Doors, Upper	6	25	37	6.42	38.54
Entrance 4, Doors, Lower	6	25	27	4.69	28.13
Door 5 windows (Delaware Ave.)					
Entrance 5, Door, Upper	1	33	36	8.25	8.25
Entrance 5, Door, Lower	1	33	26	5.96	5.96
Door 6 windows (Delaware Ave.)					
Entrance 6, Doors, Upper	6	25	37	6.42	38.54
Entrance 6, Doors, Lower	6	25	27	4.69	28.13
Door 7 windows (Delaware Ave.)					
Entrance 7, Doors, Upper	6	25	37	6.42	38.54
Entrance 7, Doors, Lower	6	25	27	4.69	28.13
Door 8 windows (Delaware Ave.)					
Entrance 8, Doors, Upper	6	25	37	6.42	38.54
Entrance 8, Doors, Lower	6	25	27	4.69	28.13
Door 9 windows (Delaware Ave.) to include surrounding glass on each side of doors					
Entrance 9, Doors, Upper	2	25	37	6.42	12.85
Entrance 9, Doors, Lower	2	25	26	4.51	9.03

Leastion	Quantity	Width	Height	Square Feet Opening	Square Feet Total
Location Entrance 9, Sidelights, Upper	Quantity 3	(inches) 18	(inches)	(W x H) / 144 6.25	Qty x Sq Ft Opening 18.75
	3	18	50 27	3.38	10.13
Entrance 9, Sidelights, Lower Door 10 windows (Delaware Ave.)	3	10	21	3.30	10.13
Entrance 10, Door, Upper	1	33	37	8.48	8.48
Entrance 10, Door, Lower	1	33	27	6.19	6.19
Door 12 windows (Delaware Ave.) to include surrounding glass on each side of doors		05	07	0.40	40.05
Entrance 12, Doors, Upper	2	25	37	6.42	12.85
Entrance 12, Doors, Lower	2	25	27	4.69	9.38
Door 19 windows (N. Marginal side) to include three levels of windows on each side of doors					
Entrance 19, Doors, Panels	8	11	28	2.14	17.11
TOTALS:	112				595.75
Hannas Mann Elamantara Oskasl					
Horace Mann Elementary School				10.10	04.00
Doors 1 and 2 (Lobby)	2	26	69	12.46	24.92
Door 3 windows (West Clifton Drive)					
Entrance 3, Doors	2	26	32	5.78	11.56
Door 4 windows (West Clifton Drive)					
Entrance 4, Doors	2	26	32	5.78	11.56
Door 5 (West Clifton Blvd.) to include surrounding glass around the doors					
Entrance 5, Doors	2	22	77		
Entrance 5, Sidelights	2	20	71	9.86	19.72
Door 6 (West Clifton Blvd.) to include surrounding glass around the doors					
Entrance 6, Doors	2	28	78	15.17	30.33
Entrance 6, Sidelight	1	18	84	10.50	10.50
Door 10 (Gym Entrance) to include all glass surrounding the entrance doors					
Entrance 10, Doors	3	26	80	14.44	43.33
Entrance 10, Sidelight	1	14	91	8.85	8.85
Entrance 10, Sidelight	1	25	91	15.80	15.80
Entrance 10, Sidelight	1	56	91	35.39	35.39
TOTALS:	19				211.95
Lincoln Elementary School					
Door 1 (Main Entrance) to include all glass on each side of doors					
Entrance 1, Doors	2	25	69	11.98	23.96
Entrance 1, Sidelights	2	28	68	13.22	26.44
Door 2 (Parking lot side) to include all panes of glass on each side of doors - Total 10 panes					
Entrance 2, Doors	2	25	71	12.33	24.65

Location	Quantity	Width (inches)	Height (inches)	Square Feet Opening	Square Feet Total
Entrance 2, Windows	10	24	68	(W x H) / 144 11.33	Qty x Sq Ft Opening 113.33
Door 3 windows (Playground side)	10	27	00	11.00	110.00
Entrance 3, Doors	2	6	51	2.13	4.25
Door 7 (Summit Ave.) to include pane of glass to right of door	£	<u> </u>	01	2.10	4.20
Entrance 7, Doors	2	23	37	5.91	11.82
Entrance 7, Sidelights	1	25	81	14.06	14.06
Door 8 (Summit Ave.) to include panes of glass to the right of door - Total 6 panes		20	01	14.00	14.00
Entrance 8, Doors	22	37	6	1.45	31.95
Door 9 windows		01	Ŭ	1.40	01.00
Entrance 9, Doors	2	6	51	2.13	4.25
Door 10 windows	£	<u> </u>	01	2.10	4.20
Entrance 10, Doors	2	22	37	5.65	11.31
Door 11 (Clifton Blvd.) to include surrounding glass on each side of doors	L		01	0.00	11.01
Entrance 11, Doors	2	25	68	11.81	23.61
Entrance 11, Sidelights	2	16	67	7.44	14.89
Door 12 windows (Parking lot side)		10	01		11.00
Entrance 12, Doors	2	6	50	2.08	4.17
	ALS: 53			2.00	308.70
Roosevelt Elementary School					
Door 1 (Main Entrance) to include surrounding windows of the doors and Main Office					
Main Entrance, Doors	4	25	67	11.63	46.53
Main Entrance, Sidelights	7	23	51	8.15	57.02
Main Entrance, Sidelights	2	57	51	20.19	40.38
Door 8 (Bayes Ave.) to include four panes of glass surrounding door					
Entrance 8, Doors	2	23	70	11.18	22.36
Entrance 8, Sidelights	4	43	52	15.53	62.11
Door 9 (Bayes Ave.) to include panes of glass on sides of door					
Entrance 9, Doors	2	23	70	11.18	22.36
Entrance 9, Sidelights	2	59	52	21.31	42.61
Door 10 (Bayes Ave.) to include panes of glass on sides of door					
Entrance 10, Doors	2	23	70	11.18	22.36
Entrance 10, Sidelights	2	59	52	21.31	42.61
Door 11 (Lincoln Ave.) to include first level of glass of stairwell					
Entrance 11, Doors	2	23	70	11.18	22.36
Stairwell, Windows	1	45	52	16.25	16.25
Stairwell, Windows	1	70	52	25.28	25.28

Location	Quantity	Width (inches)	Height (inches)	Square Feet Opening (W x H) / 144	Square Feet Total
Stairwell, Windows	dualitity 1	27	52	9.75	Qty x Sq Ft Opening 9.75
Stairwell, Windows	2	43	52	15.53	31.06
Stairwell, Windows	2	46	52	16.61	33.22
Stairwell, Windows	2	73	52	26.36	52.72
LRC, Room 20	2	10	02	20.00	02.12
Windows	1	22	80	12.22	12.22
Windows	6	52	80	28.89	173.33
Windows	2	32	80	17.78	35.56
Windows	1	22	80	12.22	12.22
TOTALS:	48		00	12.22	782.31
					102.51
Garfield Middle School					
Door 1 (Main Entrance) Door glass	2	25	65	11.28	22.57
Door 2 windows (east side of building)	2	19	65	8.58	17.15
Door 3 windows (north side of building) - staff entrance	2	25	65	11.28	22.57
Door 8 windows (North side of building - gym entrance)	2	25	65	11.28	22.57
Door 9 windows (North side of building - gym entrance)	2	25	65	11.28	22.57
Door 10 windows (west side of building)	2	25	65	11.28	22.57
Door 11 windows (west side of building)	2	25	65	11.28	22.57
Door 12 windows (front side of building - flag pole door)	2	25	65	11.28	22.57
TOTALS:	16				175.14
		I		1	
Harding Middle School					
Door 1 (Inner Lobby)					
Doors	4	24	70	11.67	46.67
Sidelights, Upper	2	14	60	5.83	11.67
Sidelights, Lower	2	14	29	2.82	5.64
Windows	8	32	59	13.11	104.89
Windows	1	24	59	9.83	9.83
Windows, Upper	4	30	60	12.50	50.00
Windows, Upper	1	21	60	8.75	8.75
Windows, Lower	4	30	29	6.04	24.17
Windows, Lower	1	21	30	4.38	4.38
Door 2 windows (northeast side of building)					
Entrance 2, Doors	2	24	70	11.67	23.33
Door 3 (Madison Ave. entrance) to include surrounding glass					
Entrance 3, Doors	2	37	70	17.99	35.97

Location	Quantity	Width (inches)	Height (inches)	Square Feet Opening (W x H) / 144	Square Feet Total Qty x Sq Ft Opening
Entrance 3, Sidelights, Upper	2	54	68	25.50	51.00
Entrance 3, Sidelights, Lower	2	54	30	11.25	22.50
Door 14 (gym entrance) to include first two levels of surrounding glass					
Entrance 14, Doors	3	25	70	12.15	36.46
Entrance 14, Sidelights, Upper	9	28	61	11.86	106.75
Entrance 14, Sidelights, Lower	9	28	30	5.83	52.50
Door 17 windows (to left of Main entrance)					
Entrance 3, Doors	1	37	70	17.99	17.99
Entrance 3, Sidelights	2	7	81	3.94	7.88
Cafeteria Hallway (Parking lot side of building) Lower two levels of glass - total 24 windows					
Windows, Upper	24	38	60	15.83	380.00
Windows, Lower	24	38	21	5.54	133.00
TOTALS:	107				1,133.36
Lakewood High School					
Door 1 (Front of building) to include all glass to right of door leading into vestibule					
Entrance 1, Doors	2	27	70	13.13	26.25
Entrance 1, Windows, Upper	2	22	86	13.14	26.28
Entrance 1, Windows, Lower	2	22	30	4.58	9.17
Door 2 (Front of building) to include all glass on sides leading into vestibule					
Entrance 2, Doors, Panels, Int.	8	30	24	5.00	40.00
Door 3 (Front of building) to include all glass to left of doors leading to stairwell					
Entrance 3, Doors, Panels, Int.	4	30	22	4.58	18.33
Door 4 (Main Office) to include first three levels of glass to the left of doors and first three levels of glass to the right of the doors that includes Cleveland Clinic windows					
Entrance 4, Doors (Lower & Middle)	4	30	22	4.58	18.33
Door 5 (Front of building) to include first three levels of glass to left of door leading to stairwell					
Entrance 5, Doors (Lower & Middle)	4	30	22	4.58	18.33
Door 6 (west driveway) Door glass					
Entrance 6, Door	1	40	34	9.44	9.44
Door 7 (west driveway) to include first two levels of surrounding glass					
Entrance 7, Doors, (Lower & Middle)	4	30	26	5.42	21.67
Entrance 7, Windows, Lower	2	34	30	7.08	14.17
Entrance 7, Windows, Middle	3	50	52	18.06	54.17
Entrance 7, Windows, Upper	3	50	30	10.42	31.25
Door 8 (west driveway) to include first two levels of surrounding glass					
Entrance 8, Doors (Lower & Middle)	4	30	26	5.42	21.67

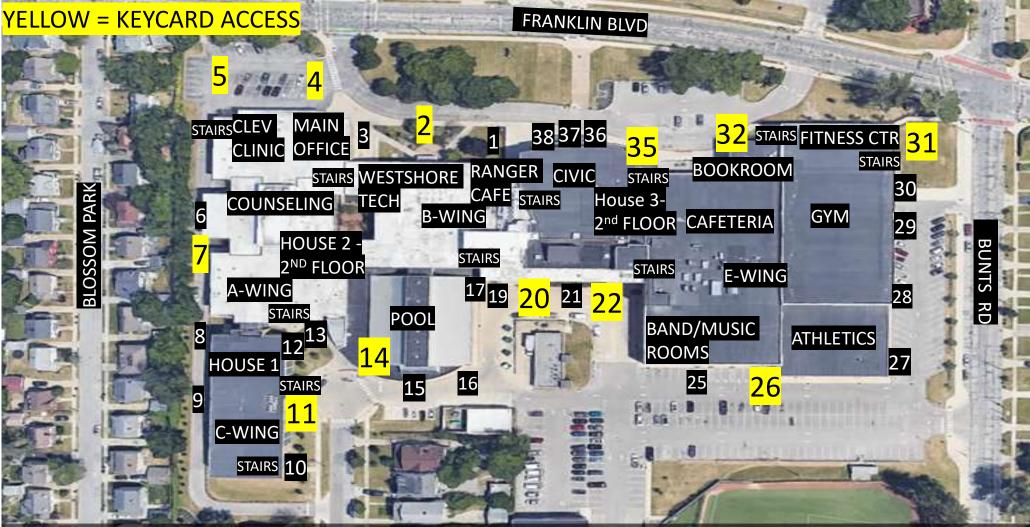
Location	Quantity	Width (inches)	Height (inches)	Square Feet Opening (W x H) / 144	Square Feet Total Qty x Sq Ft Opening
Entrance 8, Windows, Lower	2	34	52	12.28	24.56
Entrance 8, Windows, Middle	3	34	30	7.08	21.25
Entrance 8, Windows, Upper	3	50	30	10.42	31.25
Door 9 (west driveway) to include first three levels of windows to the right of door leading into hallway				10112	01.20
Entrance 9, Doors	2	28	67	13.03	26.06
Door 11 (South Robinwood Ave.) to include all windows to the right of the doorway	_				
Entrance 11, Doors	1	27	69	12.94	12.94
Door 12 (South side of building) to include first three levels of glass to the left of door leading into hallway - also includes first three levels of glass between door 12 and door 13 leading to hallway					
Entrance 12, Doors	1	27	69	12.94	12.94
Door 13 (South side of building) to include first three levels of glass around corner to right of door					
Entrance 13, Doors	2	27	68	12.75	25.50
Door 14 (Pool entrance) to include all glass to right of the doors					
Entrance 14, Doors	4	24	34	5.67	22.67
Door 17 (Rear pool door) to include three levels of glass to right of the door					
Entrance 17, Doors (Lower & Middle)	4	30	28	5.83	23.33
Door 19 (Rear of building) to include all glass surrounding door					
Entrance 19, Doors	2	24	36	6.00	12.00
Door 20 (Rear of building) to include all glass surrounding door					
Entrance 20, Doors	2	24	36	6.00	12.00
Entrance 20, Center, Upper	1	60	50	20.83	20.83
Entrance 20, Center, Lower	1	60	33	13.75	13.75
Door 22 (Rear of Building) to include glass pane to the right of the door					
Entrance 22, Doors	2	24	36	6.00	12.00
Door 26 (Athletic entrance)					
Entrance 26, Doors	2	27	74	13.88	27.75
Door 27 (Bunts Rd.)					
Entrance 27, Doors	2	27	74	13.88	27.75
Door 28 (Bunts Rd.) (Leads into gymnasium)					
Entrance 28, Doors	2	29	78	15.71	31.42
Door 29 (Bunts Rd.) (Leads into gymnasium)					
Entrance 29, Doors	2	29	78	15.71	31.42
Door 30 (Bunts Rd.) (Leads into gymnasium)					
Entrance 30, Doors	2	29	78	15.71	31.42
Door 31 (Fitness Center) include two levels of glass to left of door					
Entrance 31, Doors	1	27	77	14.44	14.44
Door 32 (Cafeteria & Student entrance) to include first level of all glass of bookroom and cafeteria area					

Location	Quantity	Width (inches)	Height (inches)	Square Feet Opening (W x H) / 144	Square Feet Total Qty x Sq Ft Opening
Entrance 32, Doors	4	27	79	14.81	59.25
Cafeteria, Windows, Lower	27	50	94	32.64	881.25
Door 33 (Patio door) to include first level of cafeteria glass					
Entrance 33, Doors	1	27	79	14.81	14.81
Door 34 (Patio door) to include first level of cafeteria glass					
Entrance 34, Doors	1	32	68	15.11	15.11
Door 35 (2nd cafeteria entrance) to include glass along sides of doors leading to vestibule					
Entrance 35, Doors	2	27	67	12.56	25.13
Entrance 35, Windows, Upper	2	35	61	14.83	29.65
Door 37 (Civic Auditorium entrance) to include all surrounding glass leading into lobby area					
Entrance 37, Doors	8	24	34	5.67	45.33
Entrance 37, Windows, Side	2	36	44	11.00	22.00
Entrance 37, Windows, Center	3	66	74	33.92	101.75
Door 38 (Civic Auditorium entrance) to include all surrounding glass leading into lobby area					
Entrance 38, Doors	8	24	34	5.67	45.33
Entrance 38, Windows, Side	2	36	44	11.00	22.00
Entrance 38, Windows, Center	3	66	74	33.92	101.75
TOTALS	147				2,107.68
Franklin School of Opportunity					
Door 1 (Main Entrance) door glass and any surrounding glass					
Entrance 1, Doors	2	23	33	5.27	10.54
Door 2 (North/Playground side of building) door glass and any surrounding glass					
Entrance 2, Doors	3	23	33	5.27	15.81
TOTALS	5				26.35
Taft Center for Innovation					
Door 1 (Main Entrance) to include surrounding glass					
Door 1, Office, Interior	1	24	67	11.17	11.17
Door 1, Office Sidelight, Interior	1	23	75	11.98	11.98
Door 1, Office, Windows	2	47	74	24.15	48.31
Door 2 (Lake Ave) door glass					
Entrance 2, Door	6	23	30	4.79	28.75
Door 3 (Whippoorwill Ave.) door glass					
Entrance 3, Door	6	23	30	4.79	28.75
Door 4 (Whippoorwill Ave.) door glass					
Entrance 4, Door	6	23	30	4.79	28.75

Location	Quantity	Width (inches)	Height (inches)	Square Feet Opening (W x H) / 144	Square Feet Total Qty x Sq Ft Opening
Door 5 (Clifton Blvd.) to include glass to the sides of the doors					
Entrance 5, Doors	2	24	66	11.00	22.00
Entrance 5, Sidelights	2	20	74	10.28	20.56
Door 7 (Parking lot) door glass					
Entrance 7, Doors	1	24	65	10.83	10.83
Entrance 7, Sidelights	2	36	65	16.25	32.50
Door 8 (Univ. of Akron entrance) to include the glass to the left of the door					
Entrance 8, Doors	1	24	66	11.00	11.00
Entrance 8, Sidelights	1	41	64	18.22	18.22
Door 10 (Entrance to modular building) door glass					
Entrance 10, Doors	2	23	29	4.63	9.26
TOTALS:	33				282.08

LAKEWOOD HIGH SCHOOL

14100 FRANKLIN BLVD



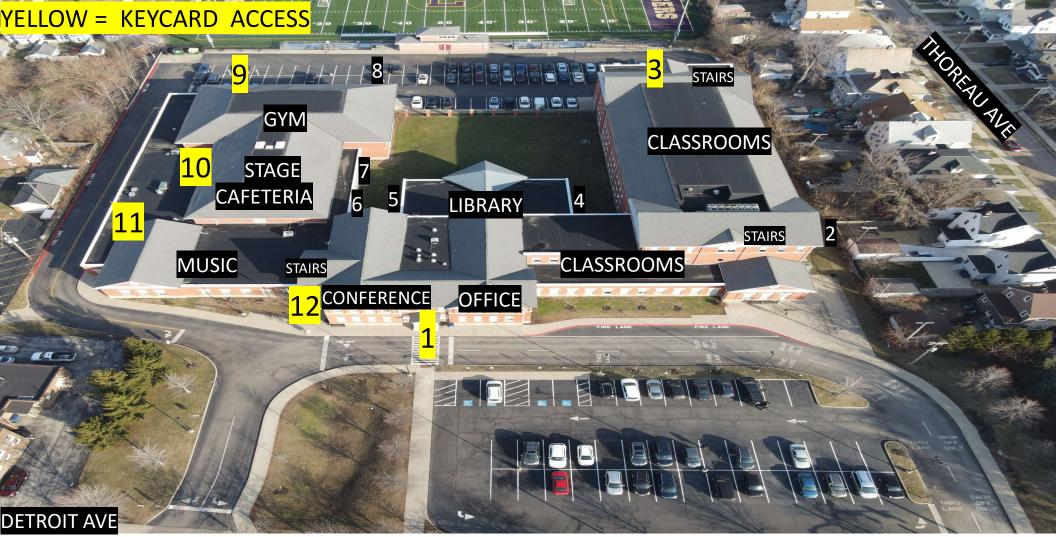
FRANKLIN SCHOOL OF OPPORTUNITY

13465 FRANKLIN BLVD



GARFIELD MIDDLE SCHOOL

13114 DETROIT AVE



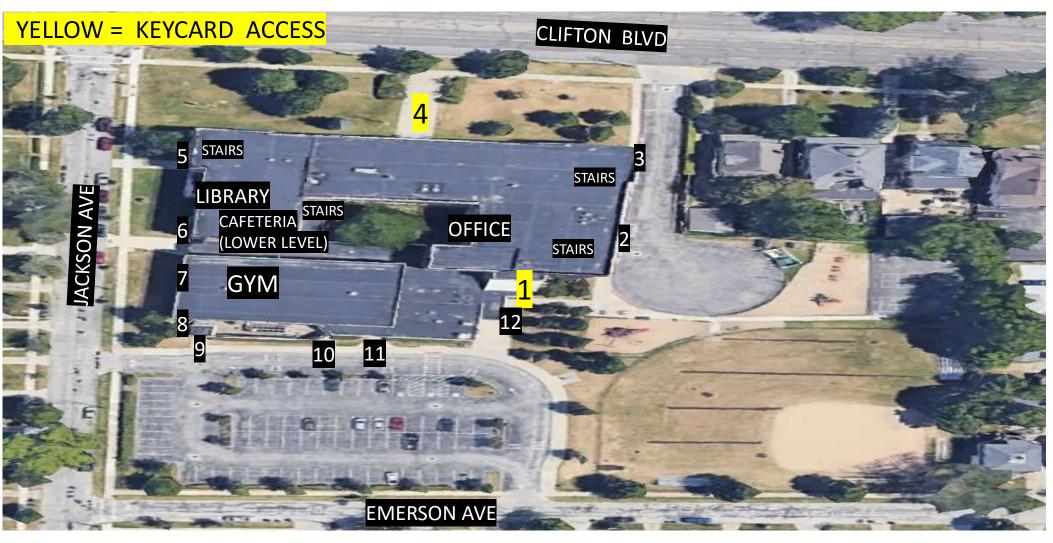
HARDING MIDDLE SCHOOL

16601 MADISON AVE



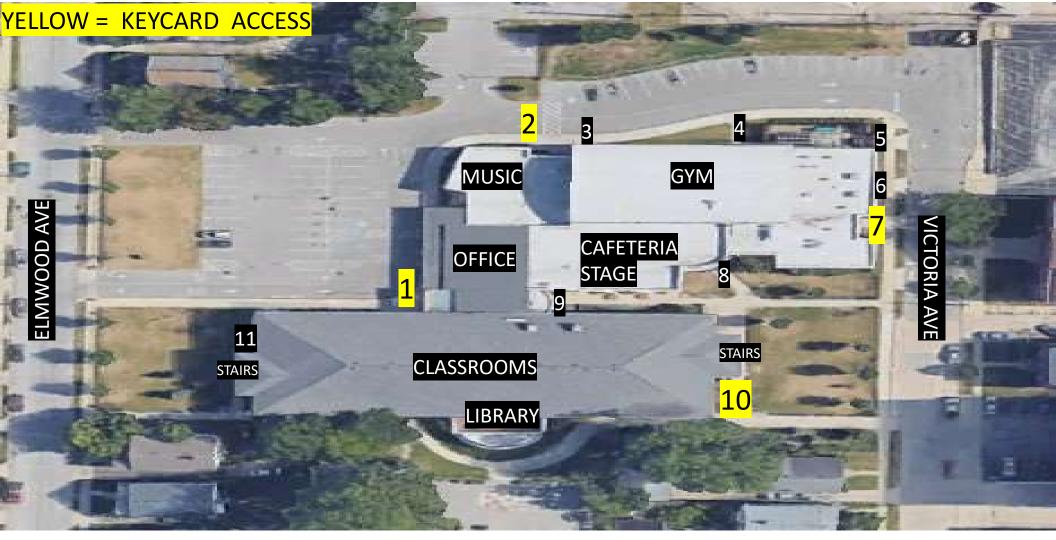
EMERSON ELEMENTARY

13439 CLIFTON BLVD



GRANT ELEMENTARY

1470 VICTORIA AVE



HARRISON ELEMENTARY 2080 QUAIL ST

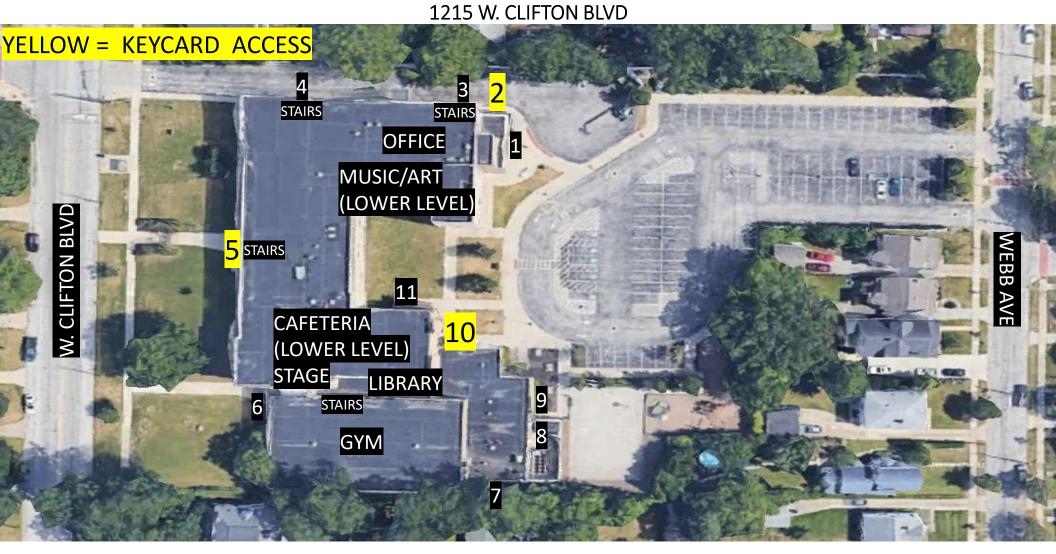


HAYES ELEMENTARY

16401 DELAWARE AVE



HORACE MANN ELEMENTARY



LINCOLN ELEMENTARY

15615 CLIFTON BLVD



ROOSEVELT ELEMENTARY

14237 ATHENS AVE



TAFT (CENTRAL OFFICE) 13701 LAKE AVE

