

District Name:	Fort Thomas Independent	District Code:	176	Facility Name:	Highlands High and Highlands Middle Schools	School Code:	010 and 011
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Project Name:	Roofing 2023	REH Project #334-922	Date:	2/13/23
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PROJECT TYPE:	Yes	No	Gross Building Area (sf.)
New Building	☐	☐	_____
Addition	☐	☐	_____
Renovation	☒	☐	_____

Provisions for Future Expansion: None

Proposed Alternates:

(1)	EPDM roof system on Gym
(2)	SBS roof system on Gym
(3)	Recoat EIFS on 2000 building
(4)	HVAC screen walls

Describe special conditions, phasing of project and alternates, attach a supplemental sheet, if needed.

BUILDING CONSTRUCTION CHARACTERISTICS:

Description of Building Structure:

Foundation: _____

Exterior Walls: _____

Roof Structure: Gym: Metal deck on roof purlins
Middle School: metal deck on steel roof joists; small portion has concrete deck

ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455):

_____ Energy Consumption "Existing" (kBtu/sf/yr)

_____ Energy Consumption Target (kBtu/sf/yr)

YES	NO	
☐	☐	LEED Certified Other: _____
☐	☐	Designed to meet Energy Star
☐	☐	Exceeds ASHRAE 90.1(2007) by 10% (Minimum)
☐	☐	Whole Building Life Cycle Cost Analysis Demonstrating Cost Effective Design
Life Cycle Cost Analysis Software Used: _____		

If not yes to one or more of the above, explain why. _____

☐	☐	Designed to be Net-Zero
☐	☐	Designed to be Net-Zero Ready

Energy Efficient Design Features: (See List Page 4, or Use Drop Down List)East / West Building Orientation ☐ YES ☐ NO

Gross Exterior Wall Area (sf): _____ Avg. Exterior Wall R-Value: _____

Gross Window / Door Area (sf): _____ Avg. Window/Door R-Value: _____

Gross Roof Area (sf): Gym: 10,500 sf ; Middle School: 41,200 sf Avg. Roof R-Value: 31.34

Exterior Wall Type: _____ Other: _____

Roofing Type: F - other, describe Other: see above

HVAC System Type: _____ Other: _____

Classroom Lighting: _____ Other: _____

Active Daylighting: _____ Other: _____

Passive Daylighting: _____ Other: _____

On Site Energy Generation: _____ Other: _____

OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA

Project: Fort Thomas Schools - Roofing 2023

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Air Purification Systems : YES ☐ NO ☐Gray Water System : YES ☐ NO ☐Low Water Use Fixtures : YES ☐ NO ☐

Other: _____

PLUMBING: N/A

Type of Sewage Disposal: _____

HEATING, VENTILATION AND AIR CONDITIONING: N/AHeating Only: _____ Heating & Mechanical: _____ HVAC: _____ A/C Only: _____
Ventilation Only

Fuel Source/Backup (if applicable): _____

ELECTRICAL: N/A

Source of Electric Power: _____

Voltage Serving Facility: _____

Number of Convenience Outlets:

Classrooms _____

Library/Media Center _____

Business Ed _____

Family & Consumer Science _____

Camera System: _____

Lighting Intensity (fc.):

Std. Classrooms _____

Library/Media Ctr _____

Science Lab _____

Science Clrm _____

Band/Music _____

Business Ed _____

Shops _____

Corridors _____

Stairways _____

Cafeteria _____

Pre-School Clrm _____

Art Classroom _____

Gymnasium _____

SPECIAL EQUIPMENT: N/A

System

Conduit Only

Conduit & Wiring

Complete w/ Equip.

Bell _____

Clock _____

Fire Alarm _____

Intercom _____

Telephone _____

Television _____

Computer _____

Wireless Network _____

Interactive White bd _____

Voice Amplification _____

FIXED EQUIPMENT: N/A

Teacher Cabinet _____

Student Lockers _____

Folding Bleachers _____

Library Furnishings _____

Custodial Room Shelves _____

Science Laboratories _____

Family & Consumer Sci _____

Other _____

Project: Fort Thomas Schools - Roofing 2023

REH Project #334-922

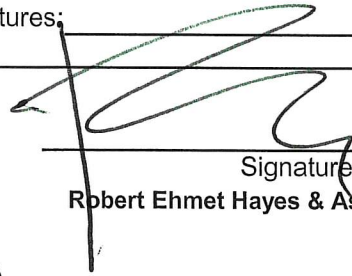
Date: February 13, 2023

INTERIOR FINISH SCHEDULE: N/A

AREA	FLOOR	WAINSCOT	WALLS	CEILING
General Office				
Corridors				
Custodial				
Kitchen				
Cafeteria				
Gym				
Showers/Locker				
Toilets				
Library/Media Cntr				
Classrooms				
Music				
Art				
Science				
FMD				
OTHER AREAS				

Miscellaneous Project Specific Features:

Kentucky Registered Architect:



Signature

Robert Ehmet Hayes & Associates, PLLC

Date: 2-2-23

Kentucky Registered Engineer: N/A

Signature

Date:

Board Designee or Superintendent:

Signature

Fort Thomas Independent Board of Education

Date:

Energy Efficient Design Features Lists

Exterior Wall Type

- A - face brick, captured air space, board insulation and waterproof CMU
- B - face brick, captured air space, sprayed insulation on CMU
- C - face brick, captured air space, sheathing over metal insulated stud system, interior finish system
- D - face brick, ICF poured concrete, interior finish system
- E - other, describe

Roofing Type List

- A - modified bitumen over rigid insulation
- B - EPDM over rigid insulation
- C - plastic single ply over rigid insulation
- D - metal roofing over nailable deck with insulation
- E - asphalt shingle roofing over nailable deck with insulation
- F - other, describe

HVAC System Type List

- A - two pipe unit ventilator system
- B - water source heat pump system with air make up
- C - ground source heat pump system with air make up
- D - hybrid water source heat pump system with boiler/chiller and well field with air make up
- E - variable refrigerant flow (VRF) with air make up
- F - hybrid geothermal/variable refrigerant flow (VRF) with air make up
- G - variable refrigerant volume (VRV) with air make up
- H - hybrid geothermal/variable refrigerant volume (VRV) with air make up
- I - chilled beam system
- J - hybrid chilled beam/geothermal system
- L - other

Classroom Lighting List

- A - T8 fluorescent fixtures
- B - T5 fluorescent fixtures
- C - high energy gas fixtures
- D - low voltage systems
- E - other

Active Daylight System List

- A - classroom fluorescent dimming including dimming switches, ballasts and sensors
- B - occupancy light control sensors
- C - remote sensor bi-level lighting with no fixtures dimming
- D - manual bi-level lighting with no fixture dimming
- E - other
- F - none

Passive Daylight Systems List

- A - upper classroom clerestory lighting with sloped ceiling plane
- B - lower classroom clerestory lighting that does NOT require sloping the ceiling plane
- C - exterior light shelves
- D - solar tubes without dimming
- E - solar tubes with internal dimmers
- F - other
- G - none

On Site Energy Generation List

- A - solar water heating
- B - solar electric generation (small units for demonstration or for limited areas)
- C - solar electric generation (to support the entire building's energy needs)
- D - wind generation (small units for demonstration or for limited areas)
- E - wind generation (to support the entire building's energy needs)
- F - other

For Reference