KENTUCKY DEPARTMENT OF EDUCATION

BG-2

702 KAR 4:160

OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA

District Name:	Marion		District Code:	375	Facility Name:	Lebanon M	/liddle School	School Code:	
	ect Name:	Marion County Public Schools Guaranteed Energy Savings Contract							
•	CT TYPE:	Yes	No			ilding Area (s			
New Buil		П	√		O1033 Du	ilding Arca (3	··· <i>)</i>		
Addition	idirig		_		-		_		
Renovati	ion	_			7:	8,082	-		
	ns for Future	☑ Expansion:				•	_		
Propose	d Alternates:	(1))						
		(2)							
		(3)							
Describe	special cond	ditions, phasi	ng of proje	ct and alterna	tes, attach a	supplementa	I sheet, if needed.		
BUILDIN	IG CONSTR	UCTION CHA	ARACTER	ISTICS:					
			-						
Description of Building Structure: Foundation:									
E	xterior Walls								
Ro	oof Structure								
1	oor Otractare	·							
ENERGY	Y EFFICIENT	DESIGN (K	RS 157.45	0 and KRS 1	<u>57.455)</u> :				
	54.3	_Energy Con	sumption "	Existing" (kBt	u/sf/yr)				
	35	_Energy Con	sumption 7	Γarget (kΒtu/s	f/yr)				
YES	NO								
	V	LEED Certif	ied	Other	·:				
	V	Designed to	meet Ene						
V		Exceeds AS	SHRAE 90.	1(2007) by 10)% (Minimum))			
V		Whole Build	ling Life Cy	cle Cost Anal	ysis Demons	trating Cost E	Effective Design		
					•	•			
If not ye	s to one or ı	more of the a							
		Designed to	he Net 7e						
	☑	Designed to Designed to							
	V	Designed to	be Net-Ze	no Neauy					
Energy I	Efficient Des	sign Feature	s: (See Li	ist Page 4, or	Use Drop D	own List)			
East / W	est Building (Orientation	☐ YES)				
Gross Ex	xterior Wall A	rea (sf):				_ Avg. Ex	terior Wall R-Value:		
Gross Window / Door Area (sf): Avg. Window/Door R-Value									
Gross Ro	oof Area (sf):					_	Avg. Roof R-Value:		
Exterior '	Wall Type:							Other:	
Roofing Type:							Other:		
HVAC System Type: C - ground source heat pump system with air make up									
Classroom Lighting: E - other								LED	
Active Daylighting:								Other:	
Paccivo Davlighting:								Other:	
On Site Energy Generation:							Other:		
	g, .								

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Air Purification System	ns: YES 🗆 NO			
Gray Water System :	YES □ NO			
	es: YES 🗆 NO			
PLUMBING:				
Type of Sewage Dispo	osal:			
HEATING, VENTILAT	TON AND AIR CONDITIONING	;		
Heating Only:	Heating & Mechanical: Ventilation Only		HVAC: X	A/C Only:
Fuel Source/Backup (i	if applicable):			
ELECTRICAL:				
Source of Electric Pov	ver:		Lighting Intensity (fc.) Std. Classrooms	: 50
Voltage Serving Facili	ty:		Library/Media Ctr	75 75
Number of Convenien Classrooms Library/Media Center Business Ed			Shops	50 75 50
Family & Consumer S Camera System:	cience		Corridors Stairways Cafeteria Pre-School Clrm Art Classroom Gymnasium	25 50 75 100 75
SPECIAL EQUIPMEN	<u>ıT</u> :			
System Bell Clock Fire Alarm Intercom Telephone Television Computer Wireless Network Interactive White bd Voice Amplification	Conduit Only	Conduit &	Wiring	Complete with Equipment
FIXED EQUIPMENT:				
Teacher Cabinet Student Lockers Folding Bleachers Library Furnishings Dry Food Shelves		Sc Fa Otl	stodial Room Shelves ience Laboratories mily & Consumer Sci ner her	

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INTERIOR FINISH SCHEDULE:							
AREA	FLOOR	WAINSCOT	WALLS	CEILING			
General Office		_					
Corridors							
Custodial Kitchen	_	_					
Cafeteria							
Gym							
Showers/Locker							
Toilets Library/Media Cntr							
Classrooms							
Music							
Art							
Science FMD							
FIVID		_					
OTHER AREAS							
Miscellaneous Proj	ect Specific Feature	es:					
Kentucky Registere	ed Architect:			Date:			
, , , ,		Signature					
K (D) (D .			
Kentucky Registere	ed Engineer:	Signature		Date:			
		Signature					
Board Designee or	Superintendent:		Date:				
		Signature					

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 place
- 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
- G none