## **KENTUCKY DEPARTMENT OF EDUCATION**

BG-2

**OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA** 

## 702 KAR 4:160

District Name:	Marion		District Code:	375	Facility Name:	Lebanon Elementary School	School Code:		
	ect Name:	Marion County Public Schools Guaranteed Energy Savings Contract							
PROJECT TYPE: Yes No Gross Building Area (sf.)									
New Bui			. <b>110</b> ☑		Cross Baile	allig / lioa (ol.)			
Addition	ŭ								
Renovat		<b>□</b>			37	,498			
Provisio	ns for Future					<u> </u>			
Propose	ed Alternates:		)						
		(3	) )						
Describe	e special con	ditions, phasi	ng of proje			upplemental sheet, if needed.			
BUILDI	NG CONSTR	UCTION CH	ARACTER	ISTICS:					
Descript	ion of Buildin	g Structure:							
Description of Building Structure:  Foundation:									
E	Exterior Walls								
R	oof Structure								
	oor On dotaro	·							
ENERG	Y EFFICIEN	T DESIGN (K	RS 157.45	60 and KRS 1	<u>57.455)</u> :				
	64.7	_Energy Con	sumption	"Existing" (kBt	u/sf/yr)				
	50	_Energy Con	sumption	Target (kBtu/s	f/yr)				
YES	NO								
	<b>V</b>	LEED Certif	fied	Other	:				
	<b>✓</b>	Designed to meet Energy Star							
<b>✓</b>			Exceeds ASHRAE 90.1(2007) by 10% (Minimum)						
	<b>V</b>	Whole Building Life Cycle Cost Analysis Demonstrating Cost Effective Design  Life Cycle Cost Analysis Software Used:							
If not ve	es to one or	Li more of the a							
	<b>V</b>	Designed to							
	<b>V</b>	Designed to	be Net-Ze	ero Ready					
		_	s: (See L	ist Page 4, or	Use Drop Do	own List)			
East / W	est Building	Orientation	☐ YES	S 🗆 NO	)				
Gross E	xterior Wall A	Area (sf):				Avg. Exterior Wall R-Value:			
Gross Window / Door Area (sf): Avg. Window/Door R-Value									
Gross Roof Area (sf): Avg. Roof R-Value:									
Exterior	Wall Type:	Other:							
Roofing	Type:						Other:		
HVAC S	System Type:		Other:						
Classroom Lighting:							Other:		
Active Daylighting:							Other:		
Passive Daylighting:						Other:			
On Site	Energy Gene	Other:							

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Air Purification Systems	YES NO			
Gray Water System:	YES □ NO			
	: YES 🗆 NO			
PLUMBING:				
Type of Sewage Disposa	il:			
HEATING, VENTILATIO	N AND AIR CONDITIONING	<u>G</u> :		
Heating Only:	Heating & Mechanical: Ventilation Only		HVAC:	. A/C Only:
Fuel Source/Backup (if a	pplicable):			
ELECTRICAL:				_
Source of Electric Power	:		Lighting Intensity (fc.) Std. Classrooms	
Voltage Serving Facility:			Library/Media Ctr Science Lab	
Number of Convenience Classrooms Library/Media Center Business Ed Family & Consumer Scie Camera System:	Outlets:nce		Science Clrm Band/Music Business Ed Shops Corridors Stairways Cafeteria Pre-School Clrm Art Classroom	
SPECIAL EQUIPMENT:			Gymnasium	
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			Custodial Room Shelves Science Laboratories Family & Consumer Sci Other Other	

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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