## KENTUCKY DEPARTMENT OF EDUCATION

702 KAR 4:160

### **OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA**

District Name:	Hopkins (	County PS	District Code:	Facility 265 Name:	Earlington ES	School Code:		make a contra
Proj	ject Name:				11.54	7.77		her are misks
PROJE	CT TYPE:	Yes	No	Gross Bu	ilding Area (sf.)			
New Bu	uilding		<b>✓</b>					
Addition	n		<b>✓</b>					
Renova	ation	4		_Tower R	teplacement			
Provisio	ons for Future	Expansion	n: N/A					Qui altu
Propos	ed Alternates	:	(1)			Lacrety strategy	A - Tayloo	and have well been
			(2)		Calle	703-07	10.5 (20.5)	- 15 Mari
Describ	oe special cor	nditions, ph	asing of project a	ind alternates, attach a	supplemental sheet, if need	ded.		you long
וח ווופ	ING CONSTE	PLICTION O	CHARACTERIST	ICS:				
				<u>100</u> .		167 - 685		
Descrip	otion of Buildin							
	Foundation	n: Existing	Slab on Grade					98.LS
	Exterior Walls	s: Block / B	rick veneer	al approved confession				<u> </u>
F	Roof Structure	e: Steel / M	etal roof	7 10-11-10				
		-	21				eserti eser	Industrial Control
ENERG	SY EFFICIEN	IT DESIGN	(KRS 157.450 a	nd KRS 157.455):				
	32	_Energy C	Consumption "Exi	sting" (kBtu/sf/yr)				
	32	Energy C	onsumption Tar	get (kBtu/sf/yr)				
YES	NO		•	PotMiss'd				
	7	LEED Ce	artified	Other:				
			to meet Energy					
				007) by 10% (Minimum	N.			
	7				trating Cost Effective Design	ın		
	<u></u>	VVIIOLE D		Analysis Software Used				
If not y	es to one or	more of th	ne above, explai		1810000	The state of the s	No. 1	
	7	Designed	to be Net-Zero					
	1	Designed	d to be Net-Zero	Ready				
	. Efficient De	olen Foot	/Saaliat	Dama 4 au Hao Duan F	Neuro Liet)			
			_	Page 4, or Use Drop D	Jown List)			
	West Building		L 1E8	□ NO	Avec Enterior Mall D	Makier		
	Exterior Wall		_		Avg. Exterior Wall R-			2000
	Window / Dod				Avg. Window/Door R-			ed an edge on the
		)			Avg. Roof R-			
	r Wall Type:					Other:		CARMON CONTRACTOR
-	д Туре:	-				Other:		
	System Type:	·				Other:		11.01
	oom Lighting:	-				Other:		and the same of the same
	Daylighting:					Other:		
Passive	e Daylighting:					Other:		li so
On Site	Energy Gen	eration:				Other:		
	-							
3-2 Fo	orm - 2013			Pag	ge 1 of 4		BG#	19-178

# **OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA**

Air Purification Systems :	YES NO V		
Gray Water System :	YES NO		
ow Water Use Fixtures :	YES NO		
PLUMBING:			
Type of Sewage Disposal: Municip	oal Utilities		
HEATING, VENTILATION AND AIR	CONDITIONING:		
Heating Only: Heating	g & Mechanical: tion Only	HVAC: X	A/C Only:
Fuel Source/Backup (if applicable):	Electrical		
ELECTRICAL:			
Source of Electric Power: TVA		Lighting Intensity (fc.): Std. Classrooms	
/oltage Serving Facility: 480 / 3	Phase	Library/Media Ctr Science Lab	
Number of Convenience Outlets:		Science Clrm Band/Music	
ibrary/Media Center		Business Ed	
Business Ed Family & Consumer Science		Shops Corridors	
Camera System:		Stairways Cafeteria Pre-School Clrm Art Classroom Gymnasium	
SPECIAL EQUIPMENT:			
System Conduit O	nly	Conduit & Wiring	Complete with Equipment
Bell Clock Fire Alarm Intercom Telephone Television Computer Wireless Network Interactive White bd Voice Amplification			
FIXED EQUIPMENT:			

## **OUTLINE SPECIFICATIONS ENERGY DESIGN CRITERIA**

AREA FLOOR WAINSCOT WALLS  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:  Kentucky Registered Engineer:  Nami Nahid, PE Signature  Board Designee or Superintendent:  Signature  Date: Signature  Date: Signature  Date: Signature	INTERIOR FINISH SCHEDULE:			10111111111	
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Classrooms Music Art Science FMD  OTHER AREAS  Miscellaneous Project Specific Features:  Centucky Registered Architect:  Signature  Centucky Registered Engineer:  Nami Nahid, PE Signature  Signature  Date:  Date:					
Music Art Science FMD  OTHER AREAS  Miscellaneous Project Specific Features:  Kentucky Registered Architect:  Signature  Kentucky Registered Engineer:  Nami Nahid, PE Signature  Soard Designee or Superintendent:  Date:  Date:					
Art Science FMD OTHER AREAS  Miscellaneous Project Specific Features:  Kentucky Registered Architect:  Signature  Kentucky Registered Engineer:  Nami Nahid, PE Signature  Board Designee or Superintendent:  Date:  Date:  Date:					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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Signature  Board Designee or Superintendent:  Date:	Kentucky Registered Engineer	Nami Nahid PF			2/11/2019
Board Designee or Superintendent: Date:	Contactly registered Engineer.		ure	-   '	2717/2010
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	loard Designee or Superintendent:			Date:	
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#### **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