District:	Hardin Cou	unty	District Code:	Facility Name:	GC Burkhead Elementary	School Code:					
New Buil Addition Renovati	-	Yes	No	Gross Floo 84,0	r Area (sf.) 07 sf						
Proposed Alternates: (1) High efficient, variable speed ground source heat pumps. (2) (3) Describe special conditions, phasing of project and alternates, attach a supplemental sheet, if needed.											
BUILDING CONSTRUCTION CHARACTERISTICS:											
Description of Building Structure: Foundation: Spread Footing											
E	xterior Walls:	8" and 12" 0	CMU cavity wall with 4" I	brick and 3" of F	Rigid Insulation (R-15)						
Ro	oof Structure:	Light gage r	metal trusses with steel	decking (Polylso	o Insulation-R-25)						
ENERGY EFFICIENT DESIGN (KRS 157.450 and KRS 157.455): NA Energy Consumption "Existing" (kBtu/sf/yr)											
2	5 - 30	Energy Con	sumption Target (kBtu/s	sf/yr)							
YES  V I I I I I I I I I I I I I I I I I I	NO U U U s to one or r	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: more of the above, explain why.									
		Designed to	be Net-Zero								
	$\checkmark$	-	be Net-Zero Ready								
Energy Efficient Design Features: (See List Page 4, or Use Drop Down List) East / West Building Orientation YES V 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):       Avg. Roof R-Value											
Exterior	Wall Type:					Other:					
Roofing Type:		<u> </u>				Other:					
HVAC System Type: Classroom Lighting:		B - T5 fluoresco		п таке ир		Other: Other:					
Active Daylighting:		F - none				Other:					
Passive Daylighting:		G - none				Other:					
On Site E	Energy Gene	Other:									
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## BG-2, 2011 OUTLINE SPECIFICATIONS 702 KAR 4:160

District: Hardin Cou	District nty Code:	Facility Name: <u>GC Burkhead Elementary</u>	code:						
Air Purification Systems	s: YES 🗌 NO								
Gray Water System :	YES 🗌 NO	 ✓							
Low Water Use Fixture Other:	s: YES 🗹 NO								
PLUMBING:									
Type of Sewage Dispos	sal: Municipal available at site	9.							
HEATING, VENTILATI	ON AND AIR CONDITIONING								
Heating Only:	Heating & Mechanical: Ventilation Only	HVAC: x	A/C Only:						
Fuel Source/Backup (if applicable):     Geothermal and all electric.									
ELECTRICAL:									
Source of Electric Powe	er: Nolin RECC	Lighting Intensity (ft. a							
Voltage Serving Facility	y: 120/208 volt, 3 phase	Std. Classrooms Library/Media Ctr Science Lab	50 FC 75 FC NA						
Number of Convenienc	e Outlets:	Science Lab	NA						
Classrooms	16	Band/Music	50 FC						
Library/Media Center Business Ed	36 NA	Business Ed Shops	NANA						
Family & Consumer Sc		Corridors	20 FC						
,		Stairways	20 FC						
Camera System:	40	Cafeteria	50 FC						
		Pre-School Cirm	50 FC						
		Art Classroom Gymnasium	100 FC 50 FC						
		Cynnadian							
SPECIAL EQUIPMEN	<u>r</u> :								
System	Conduit Only	Conduit & Wiring	Complete with Equipment						
Bell			Х						
Clock			X - Corridors only						
Fire Alarm			X						
Intercom		X	Χ						
Telephone Television		<u> </u>							
Computer		<u> </u>							
Wireless Network		X							
Interactive White bd		<u> </u>							
Voice Amplification		X							

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## BG-2, 2011 OUTLINE SPECIFICATIONS 702 KAR 4:160

District: Hardin (	District County Code:		Facility Name:	GC Burkhead Elementary	School Code:						
FIXED EQUIPMEN	T:										
Teacher Cabinet Student Lockers Folding Bleachers Library Furnishings Dry Food Shelves	Wood workspace n/a Electric, 750 Students			Custodial Room Shelves Science Laboratories Family & Consumer Sci Other Other	Metal n/a n/a n/a n/a						
INTERIOR FINISH SCHEDULE:											
AREA	FLOOR	WAINS	SCOT	WALLS	CEILING						
General Office Corridors Custodial Kitchen Cafeteria Gym Showers/Locker Toilets Library/Media Cntr Classrooms Music Art Science OTHER AREAS	Carpet Terrazzo Sealed Concrete Quarry Tile VCT Wood n/a Ceramic Tile Carpet VCT Carpet VCT N/a	n/a n/a n/a n/a n/a n/a Ceramic Ti n/a n/a n/a n/a n/a	le	PTD Gypsum Board         Gr.Face Conc.Block         PTD Concrete Block         PTD Concrete Block	Acoustical Acoustical PTD Exposed Structure Acoustical PTD Exposed Structure n/a Acoustical Acoustical Acoustical Acoustical Acoustical N/A						
Miscellaneous Project Specific Features:											
Kentucky Registere		Signature		Date:							
Kentucky Registere		Signature		Date:							
Board Designee or		Signature		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)
- $\ensuremath{\mathsf{C}}$  solar electric generation (to support the entire building's energy needs)
- D wind generation (small units for demonstration or for limited areas)
- ${\sf E}$  wind generation (to support the entire building's energy needs)
- F other
- G none