

PBCI-Engineering

TRANSMITTAL

2746 WEST COLLEGE AVENUE
STATE COLLEGE, PA 16801

(814)234-7366

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Centre Region Code Administration
2643 Gateway Drive, Suite #2
State College, PA 16801

Date: February 26, 2013

Re: St. Joseph's Catholic Academy
Science Lab Renovations
PBCI No. E33004

We are sending you:

☒ Attached
☐ Prints
☐ Specifications
☐ Other _____

Sent via:

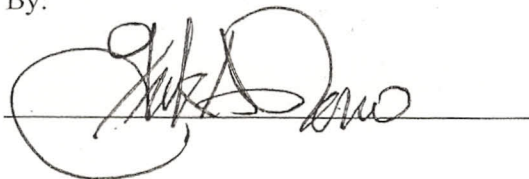
☒ Delivery
☐ U.S. Mail
☐ UPS
☐ Other _____

COPIES	DATE	DESCRIPTION
2	02-25-13	Construction Drawings – Code Submission & Bid Set
1	02-26-13	Building Permit Application
1	02-26-13	Check #2471, \$75.00 (Building Permit Fee Deposit)
1	02-26-13	ComCheck Mechanical Compliance Certificate

Items are transmitted:

☐ For your use ☒ For approval ☐ For review and comment ☐ As requested

By:



CC: File E33004

CENTRE REGION CODE ADMINISTRATION

2643 Gateway Drive, Suite #2

State College, PA 16801

Telephone: 814-231-3056

Fax: 814-231-3088

centreregioncode.org

Building Permit No.

Zoning Permit No.

Worker's Comp. Ins. No.

ADDRESS:

APPLICATION FOR BUILDING PERMIT

APPLICATION REQUIREMENTS: Documents to be submitted with an application for –NEW SINGLE FAMILY BUILDINGS – Zoning, Water and Sewer Permits and **Two** Sets of PlansNEW COMMERCIAL BUILDINGS – Zoning, Water and Sewer Permits, **Two** Sets of PlansBUILDING ADDITIONS – Zoning Permit, **Two** Sets of Plans and May Need Water and/or Sewer PermitsOTHER WORK – **Two** Sets of Plans and May Need Zoning, Water and Sewer Permits**LOCATION OF PROPOSED WORK OR IMPROVEMENT**Municipality Harris TownshipTax Parcel No. 25-009-138Number and Street 901 Boalsburg Pike, Boalsburg, PA 16827

Rural Directions _____

TYPE AND COST OF WORK OR IMPROVEMENT**Type of Improvement**

- 1 ☐ New building
 2 ☐ Addition
 3 ☒ Alteration
 4 ☐ Repair, replacement
 5 ☐ Demolition
 6 ☐ Electrical (only)
 7 ☐ Sprinkler System (only)

Describe Work:

Renovation of existing Science Labs to include removal of existing classroom toilets, asbestos floor tile removal and installation of new lab furniture including lab fume hoods. Work also includes providing lab hood exhaust fan, make-up air unit and new underground gas service. Electrical work includes replacement of outdated electrical panels.

Declared Cost (Omit cents)\$ 180,000**Dimensions**

Height in feet 34
 Number of stories 2
 Total square feet of all floor areas
 (inc. garage & basement) based on
 exterior dimensions 24,845

Type of sewage disposal

- ☒ Public or private company
☐ Private (septic tank, etc.)

Type of water supply

- ☒ Public or private company
☐ Private (well, cistern)

IDENTIFICATION

	Name	Mailing address - number, street, city, and state	Phone no.
1. Owner	Mr. Christian Klepeiss	St. Joseph's Catholic Academy 901 Boalsburg Pike, Boalsburg, PA 16827	814-808-6118
2. Contractor	Mr. Billy Sallurday	Jack Frost Construction 1307 Hale Street, Philipsburg, PA 16866	814-237-6531
3. Architect	Mr. Frank A. Peno, PE	PBCI - Engineering 2746 West College Ave., State College, PA 16801	814-234-7366 X313

AFFIDAVIT

I hereby certify that I am the owner in fee or the authorized agent of the owner in fee of the property upon which the work authorized by the permit sought will be performed. All work will be performed in accordance with all applicable laws of the Commonwealth of Pennsylvania and this jurisdiction.

Signature of owner or authorized agent

Address PBCI-Engineering, 2746 W. College Ave
State College, PA 16801

Application date
02-26-2013

Print Name

Frank A. Peno, PE

E-mail

fapeno@pbci-engineering.com



COMcheck Software Version 3.9.1

Mechanical Compliance Certificate

2009 IECC

Section 1: Project Information

Project Type: Alteration

Project Title : St. Joseph's Catholic Academy - Science Lab Alterations

Construction Site:

901 Boalsburg Pike
Boalsburg, PA 16827

Owner/Agent:

Mr. Billy Sallurday
Jack Frost Construction
1307 Hale Street
Philipsburg, PA 16866
814-237-6531
jackfrostconstruction@verizon.net

Designer/Contractor:

Frank A. Peno, PE
PBCI - Engineering
2746 West College Avenue
State College, PA 16801
814-234-7366
fapeno@pbci-engineering.com

Section 2: General Information

Building Location (for weather data):

State College, Pennsylvania

Climate Zone:

5a

Section 3: Mechanical Systems List

Quantity System Type & Description

- 1 HVAC System 1 (Single Zone) :
- Heating: 1 each - Duct Furnace, Gas, Capacity = 100 kBtu/h, Efficiency = 80.00% Ec
- Cooling: 1 each - Rooftop Package Unit, Capacity = 60 kBtu/h, Efficiency = 13.00 SEER, Air-Cooled Condenser, Air Economizer

Section 4: Requirements Checklist

Requirements Specific To: HVAC System 1 :

- ☐ 1. Equipment minimum efficiency: Duct Furnace (Gas): 80.00 % Ec
- ☐ 2. Equipment minimum efficiency: Rooftop Package Unit: 13.00 SEER
- ☐ 3. Integrated economizer is required for this location and system.
- ☐ 4. Cooling system provides a means to relieve excess outdoor air during economizer operation.

Generic Requirements: Must be met by all systems to which the requirement is applicable:

- ☐ 1. Plant equipment and system capacity no greater than needed to meet loads
Exception(s):
 - ☐ Standby equipment automatically off when primary system is operating
 - ☐ Multiple units controlled to sequence operation as a function of load
- ☐ 2. Minimum one temperature control device per system
- ☐ 3. Minimum one humidity control device per installed humidification/dehumidification system
- ☐ 4. Load calculations per ASHRAE/ACCA Standard 183.
- ☐ 5. Automatic Controls: Setback to 55°F (heat) and 85°F (cool); 7-day clock, 2-hour occupant override, 10-hour backup
Exception(s):
 - ☐ Continuously operating zones
 - ☐ 2 kW demand or less, submit calculations
- ☐ 6. Outside-air source for ventilation; system capable of reducing OSA to required minimum
- ☐ 7. R-5 supply and return air duct insulation in unconditioned spaces
R-8 supply and return air duct insulation outside the building
R-8 insulation between ducts and the building exterior when ducts are part of a building assembly
Exception(s):

- ☐ Ducts located within equipment
- ☐ Ducts with interior and exterior temperature difference not exceeding 15°F.
- ☐ 8. Mechanical fasteners and sealants used to connect ducts and air distribution equipment
- ☐ 9. Ducts sealed - longitudinal seams on rigid ducts; transverse seams on all ducts; UL 181A or 181B tapes and mastics
- Exception(s):*
 - ☐ Continuously welded and locking-type longitudinal joints and seams on ducts operating at static pressures less than 2 inches w.g. pressure classification
- ☐ 10. Hot water pipe insulation: 1.5 in. for pipes ≤1.5 in. and 2 in. for pipes >1.5 in.
Chilled water/refrigerant/brine pipe insulation: 1.5 in. for pipes ≤1.5 in. and 1.5 in. for pipes >1.5 in.
Steam pipe insulation: 1.5 in. for pipes ≤1.5 in. and 3 in. for pipes >1.5 in.
- Exception(s):*
 - ☐ Piping within HVAC equipment.
 - ☐ Fluid temperatures between 55 and 105°F.
 - ☐ Fluid not heated or cooled with renewable energy.
 - ☐ Piping within room fan-coil (with AHRI440 rating) and unit ventilators (with AHRI840 rating).
 - ☐ Runouts <4 ft in length.
- ☐ 11. Operation and maintenance manual provided to building owner
- ☐ 12. Thermostatic controls have 5°F deadband
- Exception(s):*
 - ☐ Thermostats requiring manual changeover between heating and cooling
 - ☐ Special occupancy or special applications where wide temperature ranges are not acceptable and are approved by the authority having jurisdiction.
- ☐ 13. Balancing devices provided in accordance with IMC (2006) 603.17
- ☐ 14. Demand control ventilation (DCV) present for high design occupancy areas (>40 person/1000 ft² in spaces >500 ft²) and served by systems with any one of 1) an air-side economizer, 2) automatic modulating control of the outdoor air damper, or 3) a design outdoor airflow greater than 3000 cfm.
- Exception(s):*
 - ☐ Systems with heat recovery.
 - ☐ Multiple-zone systems without DDC of individual zones communicating with a central control panel.
 - ☐ Systems with a design outdoor airflow less than 1200 cfm.
 - ☐ Spaces where the supply airflow rate minus any makeup or outgoing transfer air requirement is less than 1200 cfm.
- ☐ 15. Motorized, automatic shutoff dampers required on exhaust and outdoor air supply openings
- Exception(s):*
 - ☐ Gravity dampers acceptable in buildings <3 stories
 - ☐ Gravity dampers acceptable in systems with outside or exhaust air flow rates less than 300 cfm where dampers are interlocked with fan
- ☐ 16. Automatic controls for freeze protection systems present
- ☐ 17. Exhaust air heat recovery included for systems 5,000 cfm or greater with more than 70% outside air fraction or specifically exempted
- Exception(s):*
 - ☐ Hazardous exhaust systems, commercial kitchen and clothes dryer exhaust systems that the International Mechanical Code prohibits the use of energy recovery systems.
 - ☐ Systems serving spaces that are heated and not cooled to less than 60°F.
 - ☐ Where more than 60 percent of the outdoor heating energy is provided from site-recovered or site solar energy.
 - ☐ Heating systems in climates with less than 3600 HDD.
 - ☐ Cooling systems in climates with a 1 percent cooling design wet-bulb temperature less than 64°F.
 - ☐ Systems requiring dehumidification that employ energy recovery in series with the cooling coil.
 - ☐ Laboratory fume hood exhaust systems that have either a variable air volume system capable of reducing exhaust and makeup air volume to 50 percent or less of design values or, a separate make up air supply meeting the following makeup air requirements:
 - a) at least 75 percent of exhaust flow rate, b) heated to no more than 2°F below room setpoint temperature, c) cooled to no lower than 3°F above room setpoint temperature, d) no humidification added, e) no simultaneous heating and cooling.

Section 5: Compliance Statement

Compliance Statement: The proposed mechanical alteration project represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed mechanical alteration project has been designed to meet the 2009 IECC, Chapter 8, requirements in COMcheck Version 3.9.1 and to comply with the mandatory requirements in the Requirements Checklist.

FRANK A. PEND, PE
Name - Title


Signature

2-26-13
Date

Section 6: Post Construction Compliance Statement

- ☐ HVAC record drawings of the actual installation, system capacities, calibration information, and performance data for each equipment provided to the owner.
- ☐ HVAC O&M documents for all mechanical equipment and system provided to the owner by the mechanical contractor.
- ☐ Written HVAC balancing and operations report provided to the owner.

The above post construction requirements have been completed.

Principal Mechanical Designer-Name

Signature

Date