



NUNN CONSTRUCTION INC.

Lake George Charter School Construction Newsletter

Newsletter Date: December 2011
Volume 1, Issue 4



By: Deidra Arnold, Community
Liaison - Nunn Construction, Inc.

WINTER CONSTRUCTION PHOTOS



2 Degrees to Start the Day!!!! Brrrrrr.

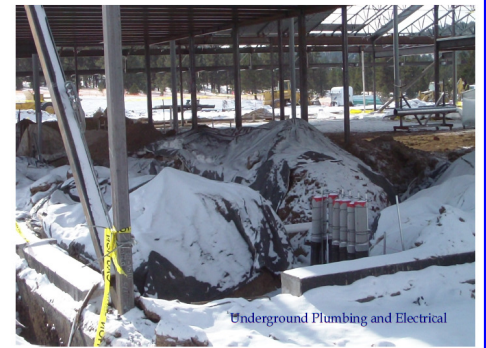


Steel Framed Exterior Walls Beginning



Building Steel Structure
Nearly Complete

Steel Stairs for the Mezzanine



Underground Plumbing and Electrical

Contents

Winter Construction Photos	1
Fun Facts	1
Construction / Classroom	2
Superintendent Message	2
Match the Word to Definition	3

Fun Facts



The next time someone triple-dog dares you to stick your tongue to a frozen metal pole – don't. Your tongue will be joined to the pole, and you'll have plenty of time to ponder the thermal conductivity of metal while you await the rescue squad.

Will Your Tongue Really Stick to a Frozen Flagpole?

Yes. Here's why:

1 Tongue warms itself
Your body pumps warm blood to your tongue.

2 Tongue touches pole
The frozen metal cools the surface of your tongue. Your body distributes more heat to cooled areas.

4 Ice forms
Moisture on your tongue freezes. The ice latches to pores in both the flagpole and your tongue. You're stuck. (Pour warm water on the connection to release your tongue.)

3 Metal takes heat
Metal is a strong thermal conductor. It pulls heat from your tongue much faster than your body can replenish it.

Thermal Conductivity is expressed in W/m K, which represents watts of heat that can be conducted through a one-meter thickness of a substance in a given amount of time (based on a one-kelvin temperature difference between two ends of the substance). Copper is a great conductor, which makes it great for cookware. Fiberglass insulation slows the transfer of heat because it is made of glass and pockets of air — both poor conductors as you can see below.

Gases	W/m K
Hydrogen	.180
Helium	.150
Air	.026
Nitrogen	.025
Oxygen	.023

Liquids	W/m K
Mercury	8.300
Water	.670
Methanol	.250
Glycol (Antifreeze)	.250
Ethanol	.140
Liquid Nitrogen	.140

Solids	W/m K
Diamond	1000.0 - 2500.0
Copper	401.0
Aluminum	237.0
Iron	80.4
Stainless Steel	16.3
Ice	1.6
Glass	1.2 - 1.4
Rubber	0.16

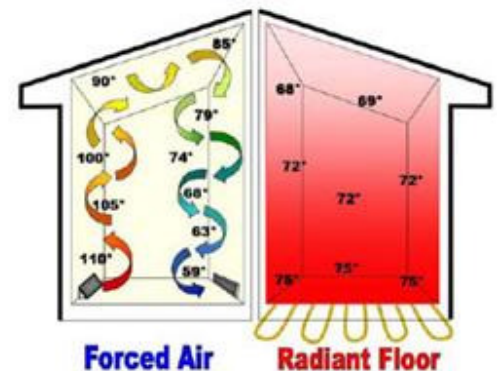
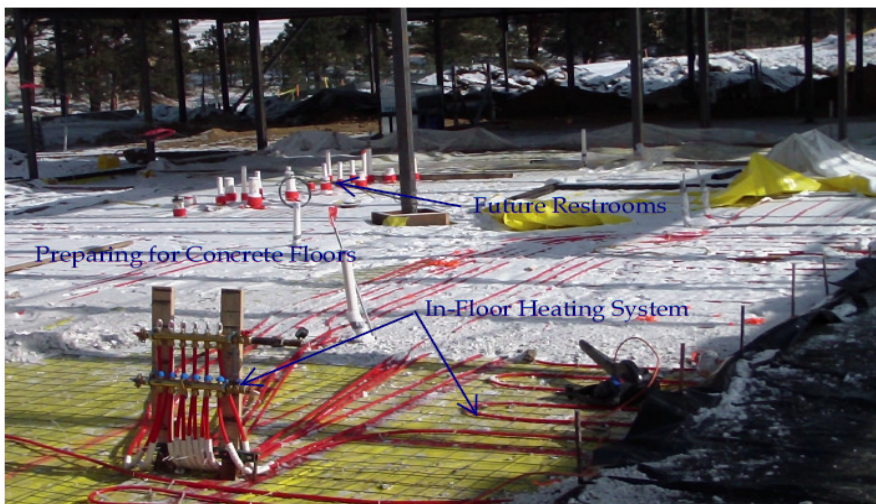
CONSTRUCTION IN THE CLASSROOM

There will be some really great features that everyone will enjoy in the new school. One great feature is the **Hydronic In-Floor Heating System** also known as: **Radiant Energy**. *(Picture below shows the installation of the In-Floor Heating System going in at the new school site.)*

What exactly is radiant energy? Here is an excellent description provided by the Radiant Panel Association: Hold your hand over a cup of hot chocolate and feel the heat. The logical conclusion is that heat rises. Logical maybe, but incorrect! "Hot air" rises but "heat" can travel in many directions. That is why you can feel the heat of the cup when you place your hand to the side of it. Radiant energy transfer is caused by a warm surface giving up its heat to a cooler surface.

Consider how the sun (10,000° F) heats the earth (61° F). The sun radiates its energy towards the earth. The radiant energy is absorbed by the earth and is released as heat.

A radiant floor heating system simply radiates heat upward from the floor to provide optimum comfort and many other benefits. According to the Hydronic Heating Association, a given volume of water can hold almost 3,500 times as much heat as the same volume of air for the same temperature rise. This means you can operate a hydronic radiant system at a lower thermostat setting than a forced-air system, resulting in lower energy bills. Source: ConcreteNetwork.com.



MESSAGE FROM YOUR PROJECT SUPERINTENDENT

Hi everyone. It is hard to believe another month has gone by in the construction schedule for the new Lake George Charter School. Much has been accomplished, as is apparent to those of you who drive by the construction site and witness the rapid progress that has been made. The structural steel building skeleton is now nearly complete, the majority of the under floor electrical and plumbing work is done and a large portion of the concrete floor has been placed. There is also construction going on outside of the building such as site utilities, etc. The steel studs that will form the exterior walls of the building have been started and will be progressing rapidly over the next month. Construction is progressing well and on schedule despite the onset of winter. Be assured that winter may slow us down a bit, but it will not stop the work. We shall trudge forward. It will be after the holidays when I next report to you, so from everyone at Nunn Construction and all of the support staff on the Charter School construction site, Happy Holidays and God bless everyone!



Jeff Overman
Project
Superintendent





Nunn Construction, Inc.
 925 Elkton Drive
 Colorado Springs, CO
 80907
 Phone:
 (719) 599-7710
 Fax:
 (719) 599-4744
 E-mail:
deidra@nunnconstruction.com

*“Trust You Can
 Build On”*

We're on the Web!
www.nunnconstruction.com

**Happy Holidays from
 Your friends at Nunn Construction!**



Match the Word to the Definition

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Voltage 2. Architect 3. Cement 4. Putty 5. A/C 6. Estimate 7. Zoning 8. Building Codes 9. Shingles 10. Gutter 11. Masonry 12. Aggregate | <ol style="list-style-type: none"> A) Roof covering of asphalt, wood, tile, or other material. B) The amount of labor, materials, and other costs that a contractor anticipates for a project. C) A governmental process and specification which limits the use of a property e.g. single family use, high rise residential use, and industrial use. D) A shallow channel or conduit of metal or wood set below and along the eaves of a house to catch and carry off rainwater from roof. E) Stone, brick, concrete, hollow-tile, concrete block or other similar building units or materials; normally bonded together with mortar to form a wall. F) A measure of electrical potential. Most homes are wired with 110 and 220 volt lines. The 110 volt is used to lighting and most of the other circuits. The 220 volt power is usually used for the kitchen range, hot water heater and dryer. G) An abbreviation for air conditioner or air conditioning. H) A type of dough used in sealing glass in the sash, filling small holes and crevices in in wood, and for similar purposes. I) The gray powder that is the “glue” in concrete. J) One who has completed the course of study in building and design (one who draws up Plans), and is licensed by the state. K) Community ordinances governing the manner in which a building or home may be constructed or modified. L) A mixture of sand and stone and a major component of concrete. |
|---|--|