

## **HVAC DESIGN & SUPPORT LLC.**

There's a need to plan for the structural elements that allow for duct placement in the correct locations along with returns for the equipment as well as suitable mechanical room location and floor space. It's no longer acceptable to throw up a bunch of beams or multi-directional joists (LVL's) and a minimum height finished basement, and then engage an HVAC contractor to show up and figure it out! That alone can have disastrous consequences forcing changes in design that can result in having a detrimental effect on the HVAC system as well as delaying the project.

The HVAC systems need to be planned in advance, at the design development phase. HVAC Design & Support responds to that need; a professionally designed HVAC System(s) for CUSTOM residential projects. The process begins with the following:

### **Stage I**

1. Collaboration with Architect/Owner/Builder at the design development phase.
2. Homeowner needs and requirements addressed. Allergies, VOC's etc, Zoning, controls. Make-up Air; Ventilation.
3. Rough design layout of air distribution system and RGD and equipment locations for review and pre-approval.
4. Pre-emptive correction of potential obstructions that may impede installation and cause delay.

### **Stage II**

5. System Designed to code for building envelope. ACCA Manual J - detailed Load Calculations; Manual S -equipment capacities; Manual D-duct design, current IECC and state code requirements.
6. CAD layout of correctly sized air distribution system, equipment locations, Register/diffuser sizes, placement, and airflow rates. Exterior penetrations vent/exhaust.
7. Specification and installation guidelines. Energy Efficient equipment brands itemized.
8. Fully documented design and overall project satisfaction.
9. Project management enhanced.- ready for field installation, easily monitored progress and verification of 'installation as specified'.

### **Stage III (if required)**

10. 'Apples to apples' bid package levels the field and eliminates 'corner cutting' and discrepancies on requirements for materials.
11. Contractor installation cost differential will be minimal.