

# My Internship with CDM Smith

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#### Introduction:

Last summer, I worked as an intern for CDM Smith, an Engineering Design and Construction Firm based in Boston, MA. There, I worked on variety of projects, focused mainly on designing HVAC plans for both new buildings and renovation. On any given day I could work on up to 3 or 4 different projects, and whenever I'm all finished, there's usually another project I can get my hands on. This way, I was able to learn a lot about the area of work CDM Smith is involved in.



#### Example HAP Project Layout

Project Edit View Reports Wizards Documentation Help

<u>Activities:</u> I learned many technical skills at CDM Smith:

- Deciphering HVAC, Plumbing, and Fire Protection plans
- Modeling rooms with Carrier HAP
- Quality Control (RYG) on ongoing designs
- Reviewing Shop Drawings

IAP50-Example       Space         Weather       Image: Construction of the systems         Systems       Image: D101 - Typical Classroom         Plants       Image: D104 - Classroom         Buildings       Image: D106 - Classroom         Project Libraries       Image: D107 - Classroom         Image: D108 - Music Room       Image: D108 - Music Room	Floor Area
<ul> <li>Weather</li> <li>Spaces</li> <li>Systems</li> <li>Plants</li> <li>Buildings</li> <li>Project Libraries</li> <li>Schedules</li> <li>Weather</li> <li>New default Space&gt;</li> <li>D101 - Typical Classroom</li> <li>D104 - Classroom</li> <li>D106 - Classroom</li> <li>D107 - Classroom</li> <li>D108 - Music Room</li> </ul>	
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Buildings     Project Libraries     Schedules	907.5
D108 - Music Room	907.5
	1781.0
D109 - Practice Room	65.0
Boofs D110 - Storage	120.0
Windows D111 - Office	174.0
Doors Doors Doors	1054.0
Shades D114 - South Corridor	920.0
Cooling Towers	
💼 Boilers	
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The Fuel Rates	
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Image from HAP (Hourly Analysis Program) Quick Reference Guide [http://www.energoplus.si/uploads/9/0/0/6/90062089/e20s-hap50\_manual.pdf]

## • Crafting Specification Sheets

### Personal Impact and Growth:

More than just technical skills, interning for CDM Smith introduced me to what professional engineering looks like after college. Going from having classes 3 to 4 hours a day to working a 40-hour week was a big change for me, and the hour and a half commute into the city meant waking up early every day, which I was not used to. However, I learned to love it, and the experience I got gave me a better perspective on what my future looks like as a mechanical engineer.

## Example Reflected Ceiling Plan (HVAC)



#### Future Work:

• There is a constant flow of work coming in and out of CDM Smith, are more buildings will continue to be designed and constructed by the engineers at CDM Smith.

• I am pleased to say that I will be continuing my internship with CDM Smith next year, where I plan to continue learning all there is to what it means to be a Mechanical Engineer in the workforce.

#### **Company Information:**

Name of Site: CDM Smith

Address: 75 State Street Suite 701. Boston, MA 02109 USA

Contact Email and Website: www.cdmsmith.com/en/Contact

Image from SkillCat [https://www.skillcatapp.com/post/a-complete-guide-to-hvac-drawings-and-blueprints]





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