



MWWIC
MENTORING YOUNG WOMEN IN CONSTRUCTION

RECAP
2021



A message from the 2021 MyWIC Committee

The National Association of Women in Construction (NAWIC) Philadelphia Chapter has been reaching out to girls in the local community for over twelve years, to teach them about construction and entice them to seek out a career in the industry.

From carpentry to electrical work, painting to sheet metal, commercial and retail construction, 7th through 12th grade girls are exposed to it all at our unique summer camp called "Mentoring Young Women In Construction".

We write to you today with gratitude for your support of the 2021 Mentoring Young Women in Construction (MyWIC) camp.

We began early summer 2021 with closed trade schools and a community of students who had not been out of the house for months. Yet, through this historic moment, we remained committed to our mission of sharing our passion of the work we do and the development of women in construction.

Of all the people working in construction, women comprise only 10.9%. Even smaller is the number of women on the front lines of a job site — only 1 for every 100 employees in the field.

There are several factors that explain this enormous gender gap, including unconscious gender bias, a lack of adequate training and negative perceptions of women working in construction.

Despite these troubling statistics, many organizations are making efforts to promote more women into leadership positions, and women working in the industry are inspiring younger generations to follow in their footsteps. **That is why we are so proud of the pages you are about to read.** Our 2021 MyWIC class present their experience and insights on what they learned during the six-weeks of camp at various trades and job site tours.

Enjoy reading about the camp through their eyes. Thank you again for your support!

HEATHER CAHILL
2021 MYWIC CO-CHAIR
ERNEST BOCK & SONS, INC.

MICHELE PAXTON
2021 MYWIC CO-CHAIR
BINSKY AND SNYDER

MARY GAFFNEY
NAWIC PHILADLEPHIA FOUNDATION
GEM MECHANICAL SERVICES

MY SUMMER EXPERIENCE AT

MyWIC Camp

2021



2021 MYWIC CAMP

PRESENTED BY THE CAMPERS

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Week one kicked off with OSHA training, trying on our PPE, knots, fire equipment, and harnesses. We also had time for meditation.

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ULTIMATE MOVE FOR POWERFUL LEGS



FOCUS ON TASK

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OSHA Training & Personal Protective Equipment

DAY 1



OSHA AND THEIR STANDARDS

In the first week of camp, we learned about worker safety and personal protective equipment. On Monday, we had a few people from the local OSHA office come to talk to us about OSHA and what they do as an organization. OSHA stands for Occupational Safety and Health Administration, and they are a government-funded organization that makes and maintains standards, or rules, for employers and employees to abide by to keep the workplace safe. They also record all injuries in the workplace, and teach workers about safety in their line of work.

OSHA is necessary to keep people safe, and show people what a workplace should be like. Under OSHA, a worker has "The right to have a proper workplace, know about chemicals, injuries, and illnesses in your workplace, request hazard training, file a complaint to OSHA, and view past medical records." Employees have the right to come forward with a hazard, and view a log of injuries in their place of work up to 5 years. Employees also have the right to be properly trained in their job, and know what they need to do to operate machinery or other things they might not know how to do. Lastly, they have the right to view the SDS, or Safety Data Sheets, which tell an employee what chemicals are in the workplace and how to handle them.

If an employer or company fails to comply with OSHA guidelines, because they are laws, depending on the severity and negligence of the violation, they could be fined up to \$136,532 for each violation alone.

OSHA AND THEIR STANDARDS

When handling chemicals, working from heights, in a live construction site, or doing any other thing considered dangerous, you have to wear a form of PPE. PPE stands for personal protective equipment, and it consists of things a person can wear on their body as a precautionary measure so if something spills, falls, breaks, moves suddenly, hits you, or you fall, you are safe or more safe than you would be. Some personal protective equipment includes hard hats, gloves, safety glasses, harnesses, steel toed boots, bright vests, a welding shield, etc.

PPE is very important to wear because it can save lives. If something were to ever happen on a job, like you fall off a building, something falls on your head, or you shoot a nail in your toe, your PPE is there to protect you. It keeps people safe from hurting themselves in an accident, and can help people safely build things technology would not allow.

"Under OSHA, employees have the right to have a proper workplace, know about chemicals, injuries, and illnesses in the workplace, request hazard training, file a complaint, and view medical records."

BY JULIA L.

Fire Safety, Tying Knots, & Mechanical Advantage

Fire Away!

On Tuesday July 13th, we visited a organization called **Med-Tex**. While on the site, we learned all the different safety precautions we have to use in order to keep safe. Another thing we learned about was how to use was a **fire extinguisher**. If you are in a situation where there is a fire you must aim at the base of the fire to put it out effectively, and if you are unable to put out the fire, walk away and call for help.



Also at **Med-Tex**, we got to see the tools that construction workers use and that really stood out. One of the tools we used were ropes. We used the ropes to tie knots that are for harnesses and pulleys. This tool is really important, as the construction workers can reach different parts of a building. They are also called safety ropes to help during a rescue.

We also learned that *Mechanical Advantage* in construction is when emergency services use pulleys and rope to pull a person out of a hole or other dangerous situations on a job site to save a worker's life.



Wants & Needs, Meditation, Job Brainstorm

On Thursday of Week 1, we first did a meditation session for ten minutes. It was really soothing and calming. A video was played about meditation and the person on the video was talking about breathing.



We then started to talk about ways people spend money and how you should try to spend less. I think this part is very important because people tend to overspend on unneeded things.



There was a book passed around about the different jobs there are. We did a job brainstorm to get an idea of what we want our career to be.



A poster was hung up on the wall and it was about wants and needs. People do spend a lot and we made a list of what we actually need and what we just want.

By Amy



WowTown

On Monday, we went to **Five-Below's Headquarters**. When we got to Five-Below, we first waited in the lobby and met some of the people on the architectural team who worked there. After they introduced themselves, we took a tour of the building. The building's workplaces were very close to each other, but had different seating options to sit and work. So, if you wanted privacy for a phone call you had to go into a separate room, but could also sit in a bean bag chair to write an email. After the tour, we got snacks and met Glen, the head of the architectural department, who did a presentation on Five-Below and their expansions. We learned that Five-Below has 47 stores in Philadelphia, and that the goal is to have 1200 stores by the end of 2022. The main thing we learned about was **retail construction**. We learned that there are a lot of things that go into making a retail space, like displays, registers, and products, while still keeping the price low on all of the construction.

Next, we visited **Nerd Street Gaming's Headquarters**, and talked to their construction company who is building Nerd Street's new gaming center, called Scungio Borst. They talked to us about what it was like being a construction consultant, helping clients make preparations for upcoming projects. Their hourly rate is \$34.13. Their project manager also came to talk to us. The **project manager** oversees all of the **physical labor being done in the building, oversees the budget and schedule to make sure everything is on time with low costs.**

LEARNING ABOUT SHEET METAL



Sheet Metal workers provide comfort for people who are in buildings. They provide **HVAC**, meaning they put in systems that put heating in buildings when it's cold outside, air conditioning when it's hot outside, and ventilation.

They also do **decorative work, install gutters, siding, railroads, make cargo trains, and airplanes**, making it a very diverse trade. To be a Sheet Metal Union Worker, you need map skills, how to read blueprints, and math (basic equations, Algebra, Trigonometry, and Geometry.)

To get into the union as an apprentice, you first need to take an aptitude test, the same one for the military, to test your general knowledge. People who score high on the test then get interviewed by the union, and if they like you, you receive a letter of acceptance. Then, you get a 3 day orientation and training, which provides OSHA, red cross safety training, tools, PPE, and clothing you need to wear before going on the job before becoming an apprentice.

While apprentices are still training and can't work alone, a Journey-Person takes apprentices under their wing and takes them on the job to learn, and eventually work alone.

Sheet Metal workers in Philadelphia make an average of \$27.05 per hour, making an average of \$80k per year. The highest you can make is as much as \$30, making an average of 90k per year.

"Sheet Metal workers are responsible for providing heating ventilation and AC (HVAC)."



"The annual salary is \$25,000-51,000 a year and \$37,000-76,000 for an experienced sheet metal worker."



At the **Sheet Metal Training Center** we turned pieces of sheet metal into a toolbox. We took a visit to their apprentice shop, and **bent four pieces of pre-cut metal into the shape to make a toolbox**. Going around the room with our mentors, we folded the pieces of sheet metal on the machines into metal, so we could hammer together to fit the shape of a toolbox. After the tabs on the metal were folded, and the base was in the correct shape, we used a hammer to push all of the side tabs in and connected the metal together into place. At the end, we used a **point welder** to attach the handle to the box. We went on a tour of the rest of the facility, looking at a HVAC classroom, welding space, and a computer lab. The computer lab allows students to learn how to use different programs to place systems in the building before actually working in the space. At the end of the tour, we got to **choose a few of the metal cut-outs that they cut out with plasma** in the welding space. There was a shark, butterfly, cat, and a dog cut-outs we could choose from.

ELECTRICIANS

DAY 5

BEING AN ELECTRICIAN

This week, we did a lot of work in some of the different trades. On Monday, we went to the IBEW Local 98, or the electricians hall. They first told us a little about what they do, which is wire buildings to give them power and electricity, as well as make routes for where those wires should go around a building in metal pipes to keep them secured, and make circuits to connect things like outlets and switches to the building. They said that to be a union electrical worker, you have to have 5 years of apprentice training, which includes getting through high school and passing an algebra course, being 18, and passing an aptitude test. These apprentices make \$24.60 an hour, and can get raises as they go through the program. Journey-persons make more money, starting at \$31.53 an hour, with a yearly total salary being \$65,591. Apprentices also get raises, but those are more based on a person's skills and seniority, rather than through a program.

PIPE BENDING

After the lesson about what electricians do, we then went to bend pipes, like how electricians do on the job when trying to find a route for different wires to go in the metal insulation. When doing this simulation of what happens on the job, we were taught to bend 3/4 inch pipe on a 90 degree angle. To do this, we first measured how many inches to bend the pipe, then deducted it by 6 inches because the pipe bends and stretches on the pipe bender, or what we used to bend the pipe. We then marked off where the bend should go on the pipe, and put it in the hand bender to be bent. Applying pressure to the pipe, we put it on the floor, and used the foot pedal on the bender to bend the pipe in place. We then used a level to make sure the pipe was on an even 90 degrees, adjusting as needed, and then it was ready to install!

WIRING AND BUILDING CIRCUITS

Then, we went to another room to learn about how to make circuits in buildings and wire light switches, outlets, and lightbulbs to power. In doing this, we learned how to splice wire, or how to strip a wire with a wire cutter and twist the inner copper together to create a connected wire, and put a wire nut on that splice to protect the connection. We also saw how the inside of a light switch works, like when a light switch is off the metal does not connect the wires on either side and make it work, and when the metal on the inside does touch the wires together, the light turns on. We also learned how to bend wire that was stripped, using a special hole on the wire cutters and bending the metal around a screw on what you are trying to install, and lastly, how to put those fixtures securely into place.





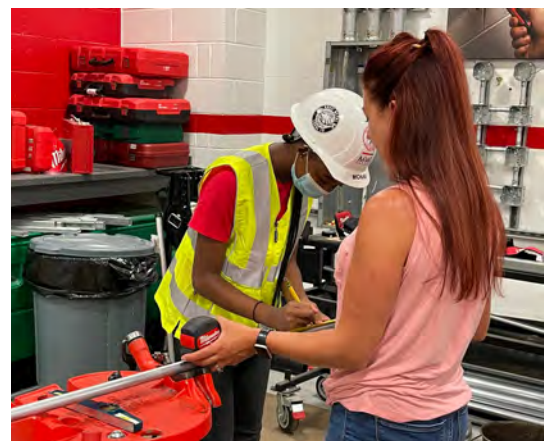
Mentors are giving instructions about how pipes work and how to properly bend them.



Amy and Jaya are working on building an outlet.

WHAT ELSE WE LEARNED

- Electricians are also supposed to wear flame-resistant protective clothing on the job to protect them from things that may burn or electrocute them. Plus, they have to wear long sleeves at all times.
- Electricians build circuits, wire light switches, light bulbs, outlets, and other sources of electricity and light together to power a building.
- Electricians bend pipes to safely run big bands of spliced, or twisted together wire, through it to protect people from the dangers of exposed wire, while still having a source of light and power in the building.





ZAYDA IS USING THE MITER SAW MACHINE.



ZYERA IS MEASURING THE WOOD BEFORE CUTTING IT TO MAKE SURE IT'S PERFECT!

A DAY AS AN CARPENTER

WHAT WE LEARNED

We visited the Carpenters Joint Apprenticeship Training Center (CJATC) in Northeast Philadelphia. First, as usual, they had a few guest speakers, including women from the trade, talk to us about what they do on the job and what the trade is like. Carpenters use mainly wood, but other materials are used as well, to construct things like cabinets to the frame-work of a building.

Carpenters are skilled tradesmen and women that help build places such as skyscrapers, homes, stores, and different types of office buildings. They also specialize in building floors that consist of wood planks, wood tiles, and subfloors.

Carpenters work on many of the places we enjoy playing at which include bowling alleys, basketball courts, playhouses, and much more. Carpenters make an average of \$49,000 to \$66,000 a year. Most people start with at least \$55 per hour once they get in the field. For this job, there is no prior education needed. Anyone can apply right after high school.

BUILDING BIRDHOUSES

For our hands-on lesson, we built birdhouses. The birdhouse consisted of 6 pieces, one 4 inch piece, being the bottom of the birdhouse, four 8 inch pieces, being the sides, front, and roof of the birdhouse, and one 11 inch piece, being the back of the birdhouse. With the supervision of the apprentices and teachers from the carpenters union, we marked off our cuts on the wood, and cut the pieces using the miter saw, making sure we cut the smallest pieces first, then cutting the larger portions.

During this whole process, we had to wear the proper personal protective equipment (PPE), including hard hats, safety vests, steel toed boots, gloves, and most importantly, safety glasses. After making the correct cuts in our wood, we then marked off one of our 8 inch pieces where our holes for the peg and our hole inside should go, and on the 4 inch piece, where our drain holes should go. Using the cordless drill, we drilled the drain holes in the 4 inch piece, then we used a different drill to make the holes for the entrance hole and the peg. After this, we assembled the birdhouse together, using nails and wood glue to connect the bottom to the side, then that piece to the front piece, and so on with the back piece, and the roof. Next, we had one of the union workers use screws to screw in the door, so if you needed to clean out the house, you could get into the house. Lastly, we used wood glue to glue a peg into the hole we made for it, and our house was complete.

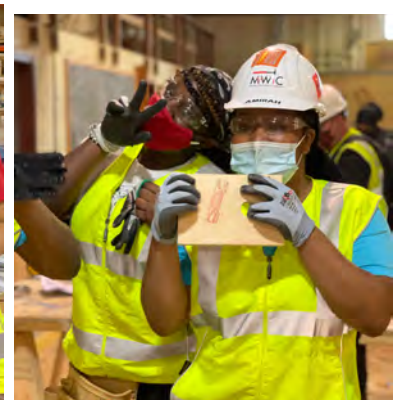
Many of us wanted to give up. Luckily, we had the tradeswomen beside us empowering and encouraging all of us not to. One of the women that we met told us "There is no such thing as a man's job".



Simone is learning to cut wood.



Group learning about the drill press





ASCENA RETAIL CONSTRUCTION

This week, we explored lots of different topics within the construction world, including more retail construction, drones, and housing construction. First on Monday, we learned more about retail construction when talking to Ms. Kara Cutino from the Ascena Retail Group, which owns franchises like Ann Taylor Loft and Lane Bryant. Kara is a Project Manager, they are hired to oversee construction of a place, in this case the stores that Ascena owns, and make sure the building process is on time and on budget, as well as following the plan.

Project Managers sometimes even get to touch into the design and architecture part of the construction, and sometimes get to travel for the job. Construction Managers are also another key role in the building of a retail space, and they are the people on site who oversee all of the workers building the space. Skills you need to be a Project Manager include knowing math like geometry, scale, and measurements, as well as knowing how to read blueprints, write directions and lists, take notes and remember things, and communicate.

To plan how to arrange the store, the planning team makes a prototype of what a store should look like, or a "standard," and the design team draws up the blueprint of what you would see in the store, and moves things according to the space. They have to use CAD (Computer Animated Design) to design these places, which will become the blueprint of what is to go where in the store. Once buying a space for the store to go, it usually takes only 6 weeks to build, in which Ms. Kara and her department will oversee the construction.

Written by Julia

GIRLS LOOK MORE CLOSELY AT THE DRONE AND ASK QUESTIONS ABOUT HOW THEY WORK AND WHAT THEY DO



LEARNING ABOUT

DRONES IN CONSTRUCTION

Written by Mylenn, Zavia,
Sienna, Ivy, Aakhirra, Ty'yanna,
Monae, Camyrn, Journey

The trade we learned about this week was UAVs which stand for unmanned aerial vehicles. The main vehicle we talked about was drones. We learned about different types of drones and what they can do. To be able to get a job in this trade you need a license to be able to fly. You have to be over the age of 16. Once you obtain a license, you have to take the UAG exam which stands for unmanned aircraft general. When you pass the exam, you can apply for a job. The average salary for a drone operator is \$43,091 per year in the United States. One of the rules and regulations that Ms. Kathryn Newell, owner of IDS Drones, informed us about was that drones can only be used at certain locations. There was an app that she made us download that can tell us whether or not a drone can be used in the area.



Girls gather on the roof of 2100 Hamilton Job Site Tour tour!

We took a tour of a live job site with the company Ernest Bock and Sons. Ernest Bock is a construction company that does project management, and oversees the work of a certain place being built. The job site we went to was on 2100 Hamilton Street, and is going to become a 10 floor building full of luxury condos with a two level valet and car elevator. The building will also have various water features on the patio, as well as a swimming pool and a gym for the residents to use. The condos will be priced anywhere from \$2,500,000 to \$6,000,000, with customizable layout options based on the residents' needs.

When we first got to the job site, Ms. Heather Cahill talked to us about safety, PPE, and other hazards we should be aware of and protected from before going into the building. We needed to wear our steel toed boots, hard hat, safety vest, long pants, and safety glasses before going into the building, to be protected from any falling objects, debris or dust in the air, and other hazards that may get us hurt. They also gave us pamphlets of what the layout is for each of the units, drawn using CAD, as well as pictures of what the space will look like completed. We started out the tour in the 10th floor penthouse, the biggest condo in the building, and looked at the construction going on. The patio had a beautiful view of the city skyline, and also had a great view of the Art Museum.

The walls were done in a window wall system opposed to a curtain wall system, so people who lived there could see outside while the building looks aesthetically pleasing. We watched as the workers installed things into the building, then we visited unit D on the 7th floor. They showed us on the pamphlet what the home will look like, with fancy kitchens, fireplaces in the bedrooms, and a ventilation system that would put fresh air into the room. As we went farther down, and visited different floors of the same unit D, we saw how it was becoming more and more finished the farther we got. As we got down to ground level, we saw their valet parking system. The resident would drive their car down into the lot, and a staff member would put it in the car elevator, and bring it to the car park, so the resident doesn't have to.

We went down farther to see where the cars would be parked, and got to the bottom of the building where an old train railroad used to be. The construction manager said that one of the challenges they faced when building the space was being conscious of the railway, because they were not allowed to block it off in case SEPTA wanted to reopen it.



After we were finished looking around the job site, we went back to Ernest Bock offices to build wooden organizers in their shop, and do a hands-on activity for the day. When we got there, the pieces of wood we needed were already pre-cut to the size and shapes we needed to build the organizers. We paid attention to the construction of the demonstration organizer, and using that as a reference we nailed together the box, with the help of supervisors. After we put together the project, we got paint, stickers, and other supplies to decorate our organizers the way we wanted to, and personalize it to what we wanted to use it for. After that, the project was complete!



Workshop activities, Resumes



On an off-construction day, we had a workshop with three different activities. First, we created a spaghetti and marshmallow tower. I couldn't build it really high because the spaghetti sticks kept breaking, so that was a challenge.



Second, I decorated a jar with paper and then put fairy lights in it. When I turned it on, the jar lit up with different colors from the paper. After that, I developed a mood board which was whatever we wanted to make. I created a sunset relaxing aesthetic on Canva, a digital designing website.



On another day, we talked about an elevator pitch which is a few words or sentences about yourself that stand out. We also talked about resumes and started building one for ourselves.

I really liked building our own resume because getting the experience early is better than getting it later.

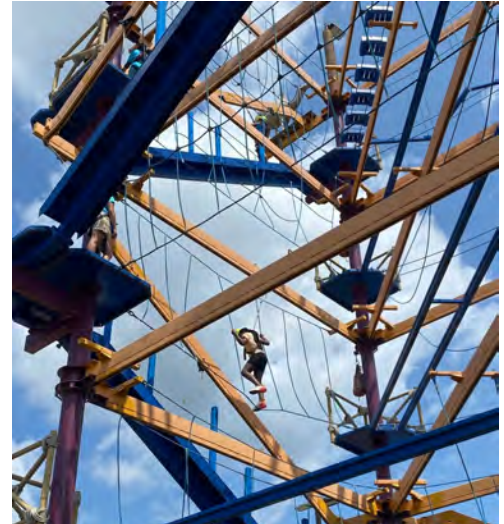
By: Amy V.

DIGGERLAND USA

FUN DAY!

DAY 9

We went to Diggerland USA to take a break from all of the strenuous work we have been doing visiting the trades and have some fun, while still being on topic with construction. The first thing we did when getting into the park was go to the pool, because we had to wait until the rides opened, and lunch was going to be soon. Many sat by the edge of the pool, dipping their feet. Some of the campers jumped in. Once lunch was finished, it was time to get to the rides! The first thing I did was go on the zipline ride with Zara, where we went up backwards in the seat and were pushed back down to the starting point. We also got to ride in a golf cart like construction equipment, and sit in a dumpster while it was in the dumping position. The scariest part for me was the ropes course, because it was a little rickety. I was scared I was going to fall off, even with the harness. The most fun part was when we got to sit in an excavator and get spun around, because all my friends were there with me, and the gravity felt weird. We also got to go to the arcade and play games, where I won three rubber ducks for my little sister in the claw machine, got three bracelets with the tickets I won, and went on the bumper cars with my friends. Overall, it was a fun and relaxing day!



LABORERS TRAINING CENTER

We went to the Laborers' Training Facility and learned many different things about laborers in the construction industry. We learned that in Philadelphia, depending on which union the laborer is a part of, they specialize in different aspects of the laboring trade. In total, there are four different laborers' unions in the Philadelphia area. Some of the specific union specializations in Philadelphia include concrete work, highway and bridge building, etc, so depending on what work needs to be done, you would go to that specific union building rather than an overall laborers union.

Laborers deal with the demolition of buildings, concrete work, digging up and installing pipelines and tunnels, building highways and bridges, scaffold building and masonry work, and getting rid of asbestos and other environmental hazards in buildings.

To be a laborer, you must have an understanding of construction and safety procedures on a job site. You would also need to know how to use the tools and equipment. You need to have skills in math, communication, time management, construction, computer, strength, and stamina. Another thing you must do is make a resume so your boss can see your skills and decide if you would be a good fit or not. In addition, laborers need at least a high school diploma or GED. You don't need experience to be a laborer because you can just learn more on the job. However, some positions want you to have at least a certain level of on-the-job experience. The salaries of Union Laborers in Philadelphia, PA range from \$19,691 to \$58,266, with the average of \$31,910 that Union Laborers get per year.

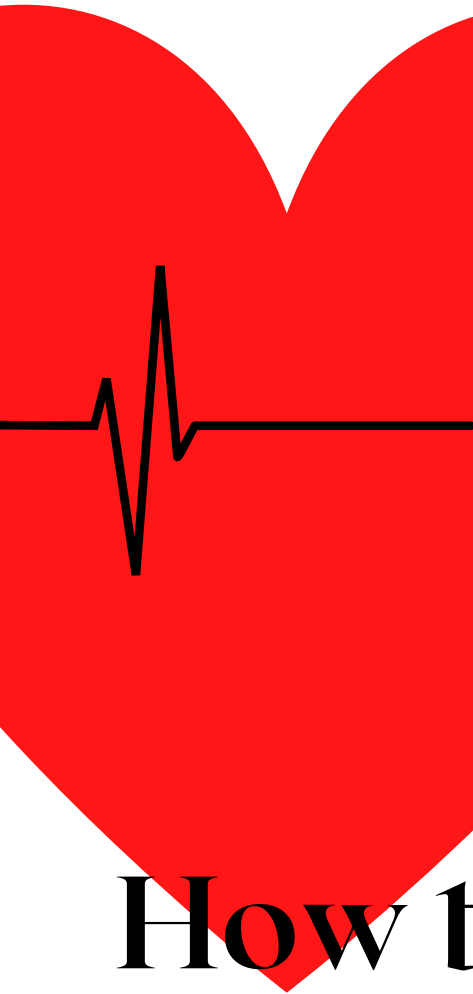


Different Types of Laborers



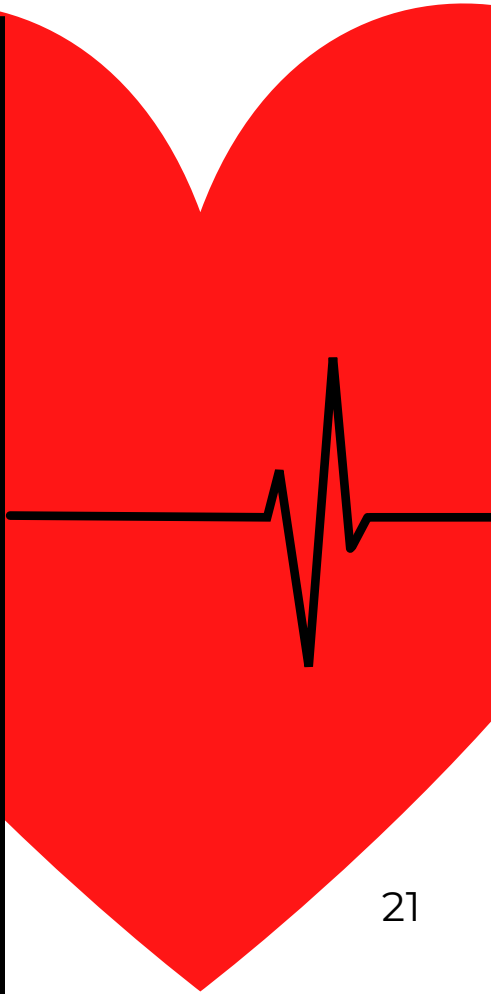
Concrete is all around us from the walls that develop us to the buildings we enter for work. **Concrete** is one of the most widely used materials for underwater structures. The laborers work on **highways, bridges, landscaping or tunnels**. The first highway was built in 1940. Things that you might not have known is that they put almost 11 to 12 inches of concrete on a highway. In addition, they put asphalt under the bridge to make sure the cars won't fall through the bridge. A **bridge worker** is a person that works on bridge maintenance, constructs bridges, and repairs bridges. **Tunnel workers** clean up, prepare sites, dig trenches, set braces to support the sides of excavations, & erect scaffolding. The average salary of a bridge worker is \$75,891 a year but top earners are able to make \$118,616 a year. Tunnel workers clean up, prepare sites, dig trenches, set braces to support the sides of excavations, erect scaffolding, and clean up rubble, debris, and other waste materials. **Landscaping workers** mow lawn, trim hedges, shrubs, and trees, grow and plant new vegetation, and they rake leaves. Landscaping workers get paid an average of \$30,617 per year.

Just Breathe



The first part of the class covered the best practices for first aid for a wide range of medical conditions. The core portion of the class provides methods and practice for treating both adults and children during a cardiac emergency. The process of CPR (Cardiopulmonary resuscitation) is that they try to help save a person's life if their breathing or heart stops. When a person's heart stops beating, you have to softly pump twice and breathe in between. If you pump too hard, their ribs might break. The most important part about CPR is basically take your time, don't rush and let the blood circulate. CPR should take 2 minutes to perform and 30 second compressions for one cycle. When you perform CPR, you start seeing the person breathe again.

How to Build a Scaffold



First you need to find all the materials. You need mudsills, cross braces, ladder, torpedo leveler, two frames, and two headed nails. Next you need to place the mudsills on a flat surface (if the surface is not flat you will need to flatten it yourself). Then, you put the screw jacks 1-2 inches away from the end. Afterwards, you put the screw jacks in the frames. you can either a.) lay the frames on the ground to put the screw jacks in or b.) you can pick up the frames and put on the screw jacks. Make sure to tighten the screws when finished. Then, you hammer two headed nails at each screw jack so the scaffold won't fall. Next, you hammer the nails on the cross braces and repeat on the second side. Next you put 5 or 6 mudsills on the top (from the inside). Finally, you go on the top of the scaffold and hammer on about 5-12 nails on the mudsills.

FINISHING TRADES: DRYWALL EDITION

By: Tyyanna and Journey

DAY 11

Finishing trades consist of contractors who specialize in finalizing, or “finishing” areas in buildings. These areas include wall coverings, paint and industrial coatings, glazing and glass work, drywall taping, signage, and trade show display. Wall coverings, plastering, painting and flooring are also considered to be the “finishing” parts of constructing a building. To work in finishing trades, you need at least a high school diploma or GED and construction experience. You also need to be at least 18 years of age. Those who want to work in a finishing trade must be physically capable of performing the work of the trade, have reliable transportation, and must be employed by a contractor who is signatory to the District Council 6. The average salary for finishing trades is 27k-80k per year in Philadelphia.



FINISHING TRADES: DRYWALL EDITION

By: Zavia, Sanaai, and Aakirrah



We met a lot of people who explained their jobs. One person that we met was Erin O'Brien who helped us with painting the wall. **We learned 5 things** which were drywall, painting, installing wallpaper, using a caulk gun, and taking out glass used for windows and installing it back. **The overall experience was good** because we learned how to do a bunch of things in one day. For example, we learned how to paint the correct way with fine line, how to spackle and fill in the lines with the tape and spackle the tape.



Simone is painting the corners of the wall using the technique Ms. Erin told us.



Ashae pouring the paint into the bucket getting ready to paint the wall.



PAIN T YOURSELF INTO A CORNER

by Camryn & Sienna

Painting is using a wet type of paste or it could be dry and with color. You can paint with a **paintbrush** or your **hands**. The tools that you would need for painting are **paper tape, paint tray, roller, paintbrush, edger, drop cloth, & five in one paint tool**. There is not a lot of education required as you really only need your **high school diploma** to get in the trade of being a painter and must be 18 or older to apply.

For extra help, you would go through an apprenticeship program. Painters can make between \$34 to \$55K a year.

The rule is you have to be careful because paint is messy and you wouldn't want to get it all over your clothes. Also there are different types of painting with **finger paint, lead paint, acrylic paint, oil paint and watercolor**. The rules and regulations is to paint from dark to light, never use black, warm light cool shadows vice versa, the **rule of thirds**, (put subject in left or right third of image), warm colors advance, cool colors recede, always have a good sketch to paint from, only paint in good light.



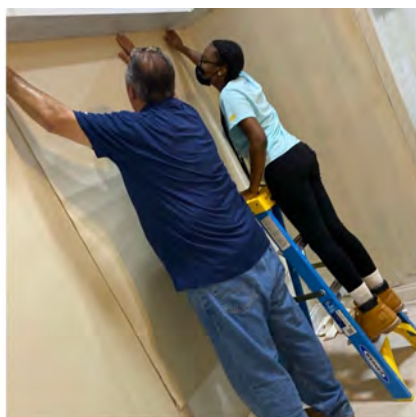
FINISHING TRADES: WALLPAPER

GIRLS ARE LEARNING HOW THE WALLPAPER WILL BE PAINTED AND HUNG UP ON THE WALL.



One of the jobs we learned about is a Wallpaper Installer. A wallpaper installer's job is to measure walls and ceilings to be able to cut wall covering so it can fit perfectly. Once it is measured, they install the fabric and paper on the wall. To be able to become a wallpaper finisher, it is required that you have a high school diploma or GED certificate. Although some companies don't require you to have any education it is recommended. Some companies may offer you on-the-job training. There is an option to enroll in an apprenticeship program which can last up to 4 years. In the program, you will learn more about the job and work on hands-on training. Most programs pay for your education. Some also pay you while being in school learning about the trade when you are performing hands-on training. The average salary is \$43,201. Every year, you earn a promotion which makes your salary increase every year.

While on the job, there are some rules and regulations. When installing the wallpaper, you have to first prime the walls. These are the preparation stages of your walls. You do this by patching any holes and sanding them smooth. When you finish that step, you cut the wallpaper to the size that is needed. Once it's marked, you can mark a plumb line and start hanging. While hanging the wallpaper, you must smooth the surface and continue to clean up the corners so you can perform the best job possible. Once finished, you fill in the gaps with caulk, trim away and seal the wall covering. These are the rules a wallpaper finisher follows while on the job.



With the help of mentor Bill, girls successfully hang up wallpaper.

Mylenn is learning how to correctly install wallpaper.

We met Bill who taught us how to apply and measure wallpaper. First, we made sure that the wallpaper was clean, then measured the wall so we knew how long to cut the wallpaper. We used vinyl wallpaper because it is very easy to clean and it is very affordable. The other wallpaper that Bill showed us was made out of fabric. If you wet the fabric, it will leave a stain. Afterward, we applied wallpaper paste using a paint roller and booked the paper. Booking the paper is folding the pasted back of the paper onto itself, top and bottom end meeting in the middle. Once that was finished we aligned the wallpaper onto the wall and pushed all the air bubbles out, and closed the seams. Overall, the experience was good. It was cool to see the wallpaper get applied.

FINISHING TRADES:

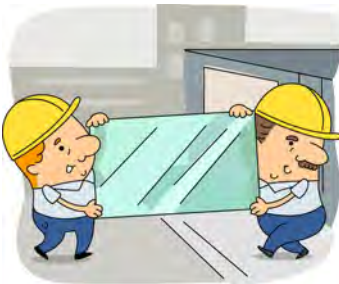
GLAZIERS

By: Julia, Brianna & Chelsea

With the help of Mrs. Tarika, girls use suction cups to lift the glass out of the frame, and put it back in.



A Glazier is a tradesperson who works with glass. Glaziers cut, install, and remove different types of glass from buildings and other structures. Glaziers don't only install glass in doors, they install glass in displays, storefronts, and skylights too. They also might have to install sashes or moldings for installations and secure them with different types of fasteners. People who like being creative while working with their hands would like being a glazier.



A Glazier in Philadelphia, PA makes between \$18 to \$30 per hour, making a minimum of \$25k, and up to \$69k per year. The average for a Glazier to make is \$21 per hour, making an average of \$44k yearly.

To be a Glazier, your entry-level education should be a high school diploma. For your experience, you would need to have ability in lifting heavy objects, good communication, professional appearance, excellent hand-eye coordination, and a high level of attention to detail. You should also have knowledge about the glass manufacturing and cutting process. The rules and regulations for a glazier are that you need to apply safe lifting techniques, ensure tools and equipment are in good working order, and to take frequent breaks to avoid fatigue.

Pushing the Glass



For the Glaziers activity, we got to take out glass from a metal frame and place it back in with Mrs. Tarika. First, we learned how to use the suction cup, by placing it on the glass and using the pump on the side to take all of the air out of the cup. To release the suction on the cup, all you had to do was push the metal release on the side to let all of the air back in.

After learning about how the suction cup worked, we then got to use it to take out a pane of glass. We first took off the rubber seal around the edges of the glass, used to keep dirt and debris out of a building, and put the suction cups on the bottom corners of the glass, making sure they were on tight so we could use them to pull out the glass.

Next, we pushed the glass up in the frame, and slid out the little rectangles that held the glass up in the frame. Then, with one hand held up high on the top of the glass and the other with an underhand grip on the suction cup, we took the glass out from the frame. We then put the glass back in, and mostly used the reverse process of pulling it out, using the cups in the same places to put it back in the frame, making sure it is in the correct slot in the frame, sliding the rectangles back into place on the windowsill, pulling the glass down on the rectangles, putting the rubber back into place, and pulling the suction cups off. That is how we learned about commercial glazing!

FINISHING TRADES: CAULKING

Caulking Queens

By: Zara, Amirah,



Caulk is used as a sealant for filling cracks or gaps around windows, doors, plumbing and pipes. When you use it properly, it can prevent water, bugs or air from entering your home.

A butt sealant joint is a joint in which sealant is applied between two approximately parallel substrate surfaces that are either edge-to-edge or face-to-edge.

We learned about caulking and how to use it properly. You use it to fill holes in the walls. To use it you have to add a piece of styrofoam (backing) so the caulk won't go all the way into the hole. Then you add some caulk in the caulk gun then you have to hold the leather and the caulk will come out. Then you take the slicker with a flat surface and smooth the caulk down and into place.



JOB SITE TOUR PENN APARTMENTS WITH CLEMENS CONSTRUCTION

DAY 12

On our final day we did a job site tour with Clemens Construction Company of a college apartment building, called Penn Apartments. The building has 481 rooms, and pricing can range anywhere from \$1700 a month for a studio apartment to \$4000 a month for a 3 bedroom apartment.

One of the construction managers, Brandon, took us through the building, noting features like the swimming pool, golf simulator, mailroom, commons area, vending machines, etc. We also got to go through some of the apartments, where some were completely ready to move-in, and others were just wood framing. In the ones where it was just the framework, we got to see the plumbing, electrical, and water going through the building.

We also got to see the parking lot, where the sprinklers were being tested, and their electrical and boiler rooms, where the electricity gets moved through and the water gets heated for the apartments.



Thank you!



GRADUATION



By Julia

After the job site tour, we went to a Drexel University office to hold graduation. Our parents came at noon, we ate, and then Angelina Perryman, VP Perryman Construction, talked to us about our career goals. She told us to overcome our challenges, persevere, try our best, keep learning, and do great things. We then watched a very sweet video of all the people we met and talked to congratulating us on our accomplishments in the program, and telling us that we are always welcome to talk to them about having a career in the field, and encouraged us to keep going.

Lastly, we held the graduation ceremony, where we received our certificate of completion of the program, as well as pictures to remember the program with, a rose, and a cookie. All in all, I had a really great time in the program, and I feel like I did something with my summer that will really benefit me as I move forward in life.

By Amy

Graduation!

After getting the apartment building tour, we graduated! We went to Drexel University Crossing where all of our parents were invited to our MyWIC Camp graduation. There was a 20 minute presentation of everything we did during this camp and all the people we met in the video giving us tips for our future career. Then we had lunch with family and peers.

It was a great experience at this camp! I loved meeting new people and learning new things. I got to experience what it's like being a construction worker. Not just learning about construction though, we learned about real life things like careers, money, and more. I am so glad to be a part of the camp this year.



Thank you to our amazing Chaperones & Volunteers!

Head Chaperone's:

Ms. Thalia Wetherill, Girls Inc. of Greater Philadelphia & Southern NJ
Ms. Niah Lombo, Girls Inc. of Greater Philadelphia & Southern NJ

Volunteers:

Michael Baraneck, Philadelphia School District
Amy Bielecki, NEST Inc.
Heather Cahill, Ernest Bock
Jayme Capanna, Ernest Bock
Katherine Scott, Ernest Bock
Brittany Ebeling, NEST Inc.
Jane Fedorczyk, Construction Risk Partners
Mary Gaffney, GEM Mechanical Services
Sarah Garner, Madison Risk Group
Meg Gingsberg, GBCA
Angela Hendrix, GBCA
Casey Kehoe, Revolution Recovery
Andrea Klein, Balfour Beatty
Erin, Knabenshue, Southland Industries
Bryon Lee, GBCA
Rose Murray, Southland Industries
Michele Paxton, Binsky
Angelina Perryman, Perryman Construction
Helen Stanley, HGV Contracting
Maria White, PA One Call System
Donna Yohe, Dale Company

Thank You

For Your Support of the 2021 MyWIC Camp





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