Deconstruction
Career Ladder, Curriculum and Job Descriptions

Deconstruction is an environmentally-friendly method of demolition, focusing on the disassembly of buildings in order to recover and re-use construction materials. Deconstruction work provides job opportunities to relatively low-skilled participants, helping them build a work history and work habits while learning basic construction-site skills. The information provided in this packet, is based upon the Miami Valley Regional Planning Commission’s (MVRPC) experience, with supplemental information from organizations such as the Institute for Local Self-Reliance and the ReUse People, which specialize in deconstruction training. MVRPC is a voluntary association of numerous local governments and non-governmental organizations surrounding Dayton, Ohio. The oversupply of vacant and abandoned housing in Dayton provided MVRPC and their partner East End Community Services with the ideal opportunity for deconstruction work in the city. This Pathways Out of Poverty program has enabled MVRPC and East End Community Services to leverage existing deconstruction projects and supplement them with screening, coaching, training and job placement assistance that will help participants build a better future in green construction trades.

This deconstruction packet seeks to provide persons interested in entering the deconstruction field with a basic understanding of the types of certifications and trainings required, as well as job opportunities within the field. Because deconstruction is considered a newer green trade, there are no national training or job standards. Therefore, information is provided within each section to help persons outside of the Dayton area locate local training facilities.

Career Ladder

Curriculums

- OSHA 30-Hour Safety Training Program
- Asbestos Contractor / Supervisor Training Program
- Lead Safety for Renovation, Repair and Painting Training Program
- Deconstruction Basic Training Certification

Job Descriptions

- General Laborer
- Team Lead
- General Supervisor
- Deconstruction Depot Representative / Retail Salesperson
- Deconstruction Depot Manager / Sales Worker Supervisor
MVRPC is working with East End Community Services to provide the training and certifications necessary to obtain a job working in deconstruction. Training covers basic safety standards, lead and asbestos removal techniques and general training in deconstruction procedures. Safety, asbestos and lead training curriculums are based upon U.S. Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA) required certifications and standards. The deconstruction basic training certification is compiled from various training programs with emphasis on MVRPC and East End Community Service’s program. Success factors include passing the assessments (at least sixth grade reading level), completion of work keys, participation with the job readiness and technical training and strong desire to perform construction work tasks. Deconstruction certificates allow a participant to build upon what they have learned to obtain additional skill sets and higher wage opportunities.

Note: Most employers require workers to pass a drug test at least once a year. MVRPC has arranged for OSHA to provide drug testing for enrollees within their program once they have secured employment. OSHA can provide a certification card, certifying drug clearance for one year.

Curriculums included in this packet of materials:
- OSHA 30-Hour Safety Training Program
- Asbestos Contractor / Supervisor Training Program
- Lead Safety for Renovation, Repair and Painting Training Program
- Deconstruction Basic Training Certification
Name of the Educational Institution: Training varies based on location. Training in Dayton, Ohio is provided by the Mid-America OSHA Education Center.¹

Pre-requisites: No background experience or education required.

Contact Information:
   Mid-America OSHA Education Center  
   33 Greenwood Lane, Springboro, OH 45066  
   Tel: 1-866-444-4412  
   www.midamericaosha.org  
   Email: info@midamericaosha.org

Description: The OSHA 30-Hour Safety Training Program trains workers in the basics of safety and health hazard recognition and prevention. According to the Mid-America OSHA 2010 Course Catalog, [t]his course is intended to provide a variety of training to workers with some safety responsibility. Workers must receive additional training on hazards specific to their job. Training will emphasize hazard identification, avoidance, control and prevention, does not include OSHA standards.²

Length: OSHA provides a 10- or 30-hour training program, with a maximum of 7.5 hours of training allowed in one day. Therefore, 10-hour courses must be delivered over a minimum of two days. 30-hour courses must be delivered over a minimum of four days. MVRPC recommends the 30-hour training program.³

Trainer Information: OSHA training can be provided by any OSHA authorized outreach trainer. To find a trainer near you, visit: http://outreachtrainers.org/client/trainer_results.aspx

Components of Training: Typically, outreach training must be conducted in person, unless provided with an exemption. For a list of the few accepted online programs, contact the OSHA Outreach Training Program Coordinator: outreach@dol.gov.

Cost of the Training: The cost of training varies based upon provider. Some examples include:  
   Mid-America OSHA Education Center - $750/student, 30-hour training program  
   OutreachTrainers.org - $195/student, 10-hour construction training  
   OutreachTrainers.org - $295/student, 30-hour construction training⁴

Additional Information: MVRPC has arranged for OSHA to provide drug testing for enrollees once they have secured a job. Most contractors require their workers to pass a drug test once a year; OSHA can provide a certification card indicating a worker’s drug clearance.
Asbestos Contractor / Supervisor Training Program

Name of the Educational Institution: Training varies based on location. Training in Dayton, OH is provided by the Mid-America OSHA Education Center.5

Pre-requisites: Enrollment differs by state and training organization. No background experience or education required.

Contact Information:
Mid-America OSHA Education Center
33 Greenwood Lane, Springboro, OH 45066
Tel: 1-866-444-4412
www.midamericaosha.org
Email: info@midamericaosha.org

Description: Asbestos Contractor/Supervisor Training is mandatory for anyone supervising or working on asbestos removal work where the debris will require more than one waste bag. This training certifies both general laborers and supervisors.6

Length: Training is a minimum of five days or 40 hours. The U.S. EPA requires you to take a one-day refresher course each year to maintain each of the Asbestos Hazard Emergency Reponse Act (AHERA) course accreditations.7

Trainer Information: The National Directory of AHERA Accredited Courses provides a list of accredited Asbestos training programs.

Components of Training: Asbestos Contractor/Supervisor Training is provided in-person, combining lectures, discussions and hands-on demonstrations. Course content includes personal protective equipment, state-of-the-art work practices, safety hazards, air monitoring, regulatory overview, insurance and liability, and supervisory techniques.8

Cost of the Training: Price varies according to provider. The Mid-America OSHA Education Center charges $230/student.9

Name of Certification: Upon successful completion of the training program, enrollees receive a Asbestos Supervisor Certificate. Certification is only valid within the issuing state. However, if the issuing body is given at least four weeks prior notice, it is possible to receive certification in 41 states. Certification is also transferrable after issuance.10

Additional Information: Employers must provide a training program for all employees who are likely to be exposed to an excess level of a Permissible Exposure Limit and for all employees performing Class I and Class IV asbestos operations.11 For explanations of different class types see: http://www.osha.gov/Publications/OSHA3096/3096.html.
**Name of the Educational Institution:** Training in Dayton, OH is provided by Mid-America OSHA Education Center.  

**Pre-requisites:** No background experience or education required.

**Contact Information:**
- Mid-America OSHA Education Center
  - 33 Greenwood Lane
  - Springboro, OH 45066
  - Tel: 1-866-444-4412
  - www.midamericaosha.org
  - Email: info@midamericaosha.org
- Clean Edison
  - 600 Superior Avenue E
  - Cleveland, OH 44114
  - Tel: 888-513-3476
  - www.cleanedison.com

**Description:** Training focuses on the use of lead-safe work practices that minimize occupants’ exposure to lead hazards by adhering to three fundamental principles: contain the work area, minimize dust and clean up thoroughly. Deconstruction contractors are required under law to provide this training to their workers if working on pre-1978 housing or child-occupied facility.

**Length:** Typical training length is eight hours and conducted in one day. Clean Edison divides the training into a five-hour online segment and three hours in-person training, however the breakdown differs depending upon the provider.

**Trainer Information:** An U.S. EPA accredited training provider must provide this training. Training in states, tribes, and territories are federally administered, with the exception of Wisconsin, Iowa, North Carolina, Mississippi, Kansas, Rhode Island, and Utah, which are authorized by the U.S. EPA to administer their own programs. 

Locate a training provider near you: [http://cfpub.epa.gov/flpp/searchrrp_training.htm](http://cfpub.epa.gov/flpp/searchrrp_training.htm)

**Components of Training:** Training differs depending upon the service provider. Clean Edison provides one example of a Lead Renovator Training Curricula: [http://www.cleanedison.com/certified-lead-renovator-training.html](http://www.cleanedison.com/certified-lead-renovator-training.html)

**Cost of the Training:** There is no standardized nationwide cost of training. In Dayton, the cost with the Mid-America OSHA Education Center is $187.50/student. Clean Edison charges $385/student.

**Additional Information:** As of January 1, 2011, firms working in pre-1978 homes and child-occupied facilities must be certified and use lead-safe work practices during renovations. The penalty for noncompliance is $37,000 per day, per violation and possible jail time. Additionally, to maintain this certification, a refresher course must be taken every three years.
Deconstruction Basic Training Certification

Name of the Educational Institution: Training varies based on location. Training in Dayton, OH is provided by Sinclair Community College.

Detail on the Core Course Offerings: Sinclair Community College, classifies deconstruction training as Civil Architectural Technology (CAT) Special Topics 297, Section 5 & 6.

Pre-requisites: Completion and certification of three separate training programs is required. The programs are OSHA 30-hour Safety Training Program, Asbestos Contractor/Supervisor Training Program, and Lead Safety for Renovation, Repair and Painting Training Program. The OSHA, Asbestos and Lead training programs can be taken in any order but must be completed before the Deconstruction Basic Training Certification can begin. Soft skills or job readiness training must be completed before enrollees begin the Certification training. Typically no further background or educational experience is required.

Contact Information:
Sinclair Community College
444 West Third Street
Dayton, OH 45402
Tel: 1-800-315-3000
http://www.sinclair.edu

Description: Deconstruction training may include, but is not limited to job site safety and personal protection; tools and equipment; recognizing materials; basic carpentry skills (measuring, fitting and basic math; fasteners and simple joinery; how a building works and name of building components); deconstruction sequence and variations (how a building is dismantled, what parts are saved and how); handling of debris; understanding layered materials; detaching fixtures and preparing for shipment; and loading materials.20

Length: Length of training depends upon training provider. Training at Sinclair Community College is two days, The ReUse Institute is two days (16 hours) and Second Chance is 16 weeks.

Trainer Information: Regional councils, community colleges, local employers and deconstruction companies, trade associations and unions or non-profits, can provide deconstruction basic training. Below is a non-comprehensive list of deconstruction providers:
• The ReUse Institute: http://thereusepeople.org/ReUseInstitute
• Building Materials Reuse Association (BMRA): http://www.bmra.org
• Second Chance: http://www.secondchanceinc.org
• Institute for Local Self-Reliance (ILSR): http://www.ilsr.org

Components of Training: Both in-person classroom training and on the job training is recommended.

Cost of the Training: Cost of training varies by location. Sinclair Community College charges $78.70/credit hour for Ohio Residents.21

Name of Certification: In Dayton, deconstruction certification is received in the form of college credit and general laborer certification. Deconstruction training certificates are also awarded upon training completion.
MVRPC is working with East End Community Services, Dayton Works Plus and St. Vincent de Paul Deconstruction Depot to place trained Pathways participants in the following job categories: General Laborer, Team Lead, General Supervisor, and Deconstruction Depot Representative and Manager.

The skills needed for each of these jobs are transferrable towards work in green construction and retrofit as well as general construction. Deconstruction work is the first step for a participant seeking to learn the building construction industry. MVRPC has found that the different populations served by the Pathways Out Of Poverty program (veterans, the unemployed, high school dropouts, ex-offenders, and no or low income workers) are a good fit for deconstruction work. Importantly, construction industries, including deconstruction, are typically some of the only ones that employ ex-offenders, which for many is the largest barrier to employment. Therefore, deconstruction is the one industry that participants with more difficult barriers to overcome can be successful in comparison to HVAC, Solar or Wind industries, which require higher reading and math scores and more classroom training time.

Job descriptions included in this packet of materials:

- General Laborer
- Team Lead
- General Supervisor
- Deconstruction Depot Representative / Retail Salesperson
- Deconstruction Depot Manager / Sales Worker Supervisor
Job Description: General laborer is an entry level position and requires the performance of a variety of basic tasks associated with deconstruction. Duties may include but are not limited to denailing, sorting, and inventory, removal of windows, doors, fixtures, flooring, roofing and walls among other structural aspects of the building.

Range of Wages: Nationwide wages for a general laborer start at $9.00 an hour. In Dayton, general laborers can make between $9.00 and $12.00 an hour.23

Qualifications: Formal education is not required to become a general laborer; however, a basic understanding of math, reading and writing and clear diction is required. These skills can be gained through soft skill or job readiness training.24

Certification: Completion and certification of four separate training programs is required. The programs are OSHA 30-hour Safety Training Program, Asbestos Contractor/Supervisor Training Program, Lead Safety for Renovation, Repair and Painting Training Program, and Deconstruction Basic Training Certification. The OSHA, Asbestos and Lead training programs can be taken in any order but must be completed before the deconstruction basic training certification can begin. Soft skills or job readiness training is completed before enrollees begin the certification training.

Experience: A general laborer is an entry level position and therefore no experience is necessary. However, if a worker does not possess prior work experience, further on the job training may be required.

Employer Type: Deconstruction employers are typically private and non-profit organizations.

Advancement Options: Advancement options open to a general laborer include team lead, general supervisor, marketing and sales of deconstruction materials, retrofitting buildings, general construction and carpentry. A general laborer can transition to a team lead typically within a couple of months depending upon the individual’s prior experience, personality and general skills.25 Transition to a marketing or sales position may require some additional training as well as an extensive knowledge of deconstruction materials.

Additional Comments: Depending upon the employer, jobs range from part-time to full-time and seasonal to year round. He or she must be in good physical condition, as they will be required to perform manual labor in potentially non-ideal situations, such as during adverse weather. This also includes being able to lift heavy objects (40-75 pounds), and use hand and small power tools on a regular and repeated basis for long hours. Evening, weekend and holiday work may be required.26

Drug Testing: Most employers require workers to pass a drug test at least once a year. MVRPC has arranged for OSHA to provide drug testing for enrollees within their program once they have secured employment. OSHA can provide a certification card, certifying drug clearance for one year.
Team Lead

Job Description: A team lead is a mid-level position. A team lead partakes in the same work as crew members, however they are responsible for ensuring that the project is carried out according to the manager or supervisor’s plans. A team lead provides a liaison between the manager and the general laborers.

Range of Wages: Team leads typically earn at least $1/hour more than general laborers.27

Qualifications: Deconstruction experience is required to become a team lead. The transition from a general laborer to a team lead can occur within several months depending upon prior experience, personality and general skills.28

Certification: A team lead needs all the certifications and training required of a general laborer. This includes OSHA 30-hour Safety Training Program, Asbestos Contractor/Supervisor Training Program, Lead Safety for Renovation, Repair and Painting Training Program, and Deconstruction Basic Training Certification.

Experience: No formal education is necessary; on the job experience is required to transition to a team lead.

Employer Type: Deconstruction employers are typically private and non-profit organizations.

Critical Development Experiences: Advancement options open to a team lead include general supervisor, marketing and sales of deconstruction materials, retrofitting buildings, general construction and carpentry. A team lead can transition to a general supervisor by showing good leadership qualities, demonstrating the ability to read blue prints and repair/refurbish/build from wood. Additional educational experience and on the job training may be required.29
**General Supervisor**

**Job Description**: A general supervisor manages deconstruction projects to maximize recovery of reusable and recyclable materials, with a priority given to reuse, while minimizing waste. The supervisor is responsible for the pre-work site review and recording the list of prerequisite work needed as well as reviewing work orders on-site before a job starts. Additionally, the supervisor must continually inspect the construction site to ensure compliance with codes and regulations as required. Other responsibilities include, hiring, supervising and motivating staff, and overseeing the proper maintenance and improvement of equipment.30

**Range of Wages**: Wages are proportional to experience. The Bureau of Labor Statistics estimates a construction manager earns an average of $53,000 a year.31 Full-time hourly positions with benefits including health insurance, paid vacation, and sick leave are available from some but not all employers.32

**Qualifications**: Supervisors usually have a college degree or considerable experience in deconstruction.33

**Certification**: A general supervisor needs all the certifications and training required of a general laborer. This includes OSHA 30-hour Safety Training Program, Asbestos Contractor/Supervisor Training Program, Lead Safety for Renovation, Repair and Painting Training Program, and Deconstruction Basic Training Certification. General supervisors must also acquire a Construction Supervisor License. This license is intended to test the literacy of Building Code requirements and general construction practices; provide tangible evidence of knowledge and abilities to potential employers and consumers. For specific state, county or city requirements for licensure, visit: [http://www.georgiacontractorlicense.net/state-licensing.html](http://www.georgiacontractorlicense.net/state-licensing.html) 34

**Experience**: A minimum five years of deconstruction experience and a minimum two years of team lead experience is required. Computer word processing, spreadsheet and database skills are recommended. A college degree is not required, however individuals who enter construction with college degrees usually start as management trainees or as assistants to construction supervisors. College graduates may advance to positions such as assistant manager, construction manager, general superintendent, cost estimator, construction building inspector, general manager, or top executive, contractor or consultant.35

**Employer Type**: Deconstruction employers are typically private and non-profit organizations.

**Critical Development Experiences**: Advancement options open to a general supervisor include advancing to a superintendent of larger projects or going into the business side of construction. General supervisor can also lead to the formation of one’s own company or a supervisory role in green building construction.36
Deconstruction Depot Representative / Retail Salesperson

Job Description: Deconstruction depot representative is an entry level position. Responsibilities include but are not limited to identifying and describing materials, conducting financial transactions, assisting in stocking merchandise, marking prices, taking inventory, and preparing displays.³⁷

Range of Wages: According to the Bureau of Labor Statistics the average wage for a retail salesperson is $11.95 an hour.³⁸

Qualifications: Formal education is not required but a high school diploma or equivalent is preferred. Additionally, soft skills or job readiness training completion is preferred.³⁹

Experience: Training is usually provided on-the-job and can range from a few days to a few months. Extensive knowledge of construction materials may be required. Example: Sales representative should be able to identify different types of wood, doors, windows, etc.

Employer Type: Deconstruction retail depots are typically private or non-profit organizations.

Critical Development Experiences: There is no set time limit required to advance to management level, it depends upon the skills and abilities of the representative. Management training or several years of experience may be required to transition to management level.⁴⁰
Deconstruction Depot Manager / Sales Worker Supervisor

Job Description: The Deconstruction Depot Manager's responsibilities include but are not limited to overseeing the work of sales and related workers, interviewing, hiring and training employees, preparing work schedules and assigning workers specific duties, and ensuring that customers receive satisfactory service and quality goods.41

Range of Wages: According to the Bureau of Labor Statistics the average wage for a sales worker supervisor is $37,710 a year.42

Qualifications: Formal education is not required, but a high school diploma or equivalent is preferred. Additionally, soft skills or job readiness training completion is preferred.43 Some marketing or sales training may be required.

Experience: Supervisors usually gain knowledge of management principles and practices through work experience. Therefore, there is no standard educational requirement for sales worker supervisors. The type and amount of training available to supervisors varies, however extensive knowledge of construction materials is required.44

Employer Type: Deconstruction retail depots are typically private or non-profit organizations.

Additional Comments: Currently this is a social enterprise and there is little market for stand-alone deconstruction depots. Therefore, managers may also be in charge of multiple programs within a larger thrift store that contains deconstruction materials.45
Works Cited

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21. Sinclair Community College, Fees http://www.sinclair.edu/services/bursar/fees/
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27. Neil Seldman, President of the Institute for Local Self-Reliance
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