

EPiC Series in Built Environment

Volume 4, 2023, Pages 112-120

Proceedings of 59th Annual Associated Schools of Construction International Conference



Understanding Career Opportunities for Construction Graduates within the Roofing Industry Distribution Sector

Dhaval Gajjar, Ph.D., Jason D. Lucas, Ph.D., Gopika Viswanathan and David Davis Clemson University Clemson, South Carolina

The construction industry continues to grow rapidly and faces a massive shortage of workers. The roofing industry, in particular, is projected to grow considerably with an increased demand for workers in the upcoming years. One critical component of the roofing industry is distribution. Distributors play a significant role in ensuring that materials arrive on site in a timely and affordable manner and act as a bridge between the roofing subcontractors and manufacturers. Attracting the next generation, Generation Z (Gen Z), is critical to address workforce shortages in the industry. The Gen Z population has various career preferences and characteristics that influence them in selecting a career. Gen Z looks for a defined career path within a specific industry that shows how their career can grow over time. This paper aims to develop and document a typical career path that college students from a construction program might have within the distribution sector of the roofing industry, with the help of a focus group. Additionally, the focus group discussed information regarding worker responsibilities, experience requirements, compensation, and benefits for each position. This paper documents the consensus findings from the focus group. This information and flowchart will aid educators and industry members in garnering interest in the distribution sector of the roofing industry will aid educators and industry members in garnering interest in the distribution sector of the roofing industry will aid educators and industry members in garnering interest in the distribution sector of the roofing industry.

Key words: Generation Z, Career Path, Workforce, Roofing Distributors

Introduction

The U.S. Construction industry employs about 6% -10% of the total workforce and significantly contributes to the U.S. economy (Assaad & El-adaway, 2021). The construction industry heavily influences the functioning of many other sectors, such as manufacturing, transportation, infrastructure, commercial spaces, etc. (Assaad & El-adaway, 2021; Azeez et al., 2019; Baral et al., 2022). A construction project requires a team effort with various parties involved in different areas of project execution, such as the general contractor, specialty contractors or subcontractors, material suppliers (also known as distributors), and manufacturers.

Subcontractors work on specialty areas and perform a specific scope of work, such as roofing, mechanical, electrical, plumbing, finishes, etc. However, for the sub-contractors to get material

T. Leathem, W. Collins and A. Perrenoud (eds.), ASC2023 (EPiC Series in Built Environment, vol. 4), pp. 112–120

deliveries, they typically work closely with material distributors for timely delivery of materials and to get competitive pricing. Distribution services are defined as wholesale trade services, retailing services, franchising and commission agents' services, that act as a link between producers and consumers – ensuring that consumers have access to a large selection of products at affordable prices (World Trade Organization). Subcontractors greatly benefit from partnering with distributors as they ensure better quality, higher reliability, more variety and personalization, faster responses to variations in demand and decreased time to market (Biruk et al., 2019). Distributors in the construction industry play an important role in keeping up with project quality, schedule, and budget (Cengiz et al., 2017).

According to the U.S. Bureau of Labor Statistics, occupations related to construction make up more than one-fourth of the fastest-growing careers and the industry projects a growth rate of 4% from 2021 to 2031 (U.S. Bureau of Labor Statistics). Between 2018 and 2028, employment in the industry is expected to increase by 10%, with over 800,000 new job openings (Callanan & Perri, 2020). In the second quarter of 2022, the construction industry contributed to 3.9% of the US GDP according to the US Bureau of Economic Analysis. Research shows that the current labor shortage will also likely increase in the construction industry (Carter 2022; Choi et al., 2022). The labor shortage and the expected increase in work demand will be problematic and must be addressed (Pandita, 2021). The average age of construction workers in the U.S. is 42.6 years, and by 2024, the percentage of workers in the age category of 55 and above is expected to double (Sokas et al., 2019). One concern brought up by the Department of Labor was the replacement of this aging workforce. Keeping up with this pace, it was expected that roughly 240,000 workers will need to be filled in (Kim, Chang, & Castro-Lacouture, 2020).

One of the important sectors in construction is the roofing industry. Similar to other sectors in the construction industry, the roofing industry is also expected to see considerable growth, thereby needing to bring in more workers (IBISWorld). According to the U.S. Bureau of Labor Statistics, the roofing industry employs 129,890 workers at a mean hourly wage of \$23.51 (U.S. Bureau of Labor Statistics). The three main entities in the roofing industry include roofing subcontractors, distributors, and manufacturers. The distributor is an essential channel between the roofing subcontractor and manufacturer responsible for material handling and logistics, inventory management, quality, and training on the job site for roofing workers, providing credit to the roofing contractors and the delivery of roofing materials to the job site. Distributors also provide services such as estimating, technical services, QA/QC inspections, etc. As of 2022, three major roof distribution companies in the U.S. account for about 70% of the roofing distribution market and the roofing distribution sector employs 55,909 workers (IBISWorld, 2022). To keep up with the industry's growth and increasing demand, attracting and retaining professionals in the roofing distribution business is critical.

One of the ways to address the workforce shortage is to attract the Gen Z population and retain current professionals in the roofing industry. Gen Z tends to be ambitious, practical, and keen on challenges (Aggarwal, Sadhna, Gupta, Mittal, & Rastogi, 2020a). They are self-learners, possess strong multi-tasking abilities, and are the first digitally connected generation with constant technological access since birth (Becker, 2022). When considering a career, this generation tends to opt for an exciting workplace that avoids redundancy and provides job stability. They prefer a flexible working environment that will allow them to work independently and be mentored (Pandita, 2021). They do not believe in being confined to an office place and can get work done from anywhere using technological tools (Csiszárik-Kocsír & Garia-Fodor, 2018). However, one of the important aspects of this generation is a defined career path within a specific company and/or industry (Goh & Okumus 2020). Research shows that this generation is not afraid of switching jobs and choosing companies that give them a clear path to promotion with a work profile/description for each position (Aggarwal et al., 2020b). Unfortunately, one of the primary reasons the construction industry has failed to attract the

younger generation so far is the lack of sufficient information regarding career paths and training (Hiranya Delvinne, Hurtado, Smithwick, Lines, & Sullivan, 2020).

The literature review shows that the roofing distribution business is a critical sector in the construction industry. Like other sectors, the distribution sector will need a workforce to meet the growing demands of the industry (IBISWorld). The skills required to work in the distribution sector of the industry align with those of students who graduate from construction management programs, thus allowing a viable path to a career for these students in this industry sector. Currently, a clear visual career path and the details of each position in the roofing distribution sector are lacking to attract Gen Z and retain current professionals, especially for those coming from a construction management degree program. To that effort, the objectives of this paper are to 1) Document the different types of positions and their description within the roofing distributor organization suitable for someone with an undergraduate construction management degree, 2) Analyze the compensation for each type of position and promotion/vertical movement expectations and 5) Generate a visual career path focused on roofing distributor organizations.

Methods

Figure 1 shows this study's four (4) phase research methodology. The methodology is adopted from the study conducted to document the visual career path for the roofing contractors (lucas et al., 2022)



Figure 1. Phases of Methodology

Phase 1: A steering committee was formed to assist in developing the study framework, provide validation, and select the participating companies from the roofing industry. Out of the three (3) major roofing distributors in the U.S., two (2) roofing distributors participated in the focus group over Zoom. The two participants hold CEO positions with the roofing distribution companies and are in charge of the national level management of the companies. The two roofing distributor companies represented about \$10B of the roofing material supply market with over 10,000 employees. Due to the focused nature of the roofing distribution sector, the steering committee agreed that this was a good representation of the sample.

Phase 2: An in-depth literature review on generational workforce preferences was used to create the focus group agenda. Items for discussion included employee positions, salary and benefits, a path to promotion, experience requirements, and responsibilities. The steering committee validated the focus group agenda by ensuring that it met the study's objectives.

Phase 3: Data were collected through discussions among two (2) roofing distributor companies. The primary participants of the distributor companies were the president and owner that had in-depth knowledge about their company structure and characteristics. There were three focused discussion points:

- a. Different types of positions within the company.
- b. Job responsibilities, salary, benefits, and experience required for each position.
- c. Identifying the typical career path that maps entry-level through upper-level positions in the roofing industry.

The data were collected and documented in real-time by giving dedicated discussion time to each distributor and then reaching a consensus after each discussion point.

Phase 4: The data collected were analyzed to develop a general career path for roofing distributor companies. Each position was analyzed and compared regarding responsibilities, experience requirements, compensation, and benefits. The mapped career path and documented information were validated with the steering committee and the two (2) distributor companies participating in the focus group.

Analysis Results

Positions and Responsibilities

The positions in the roofing distribution sector where construction management graduates could be employed fall into two categories: sales/service (technical sales and technical services) and management (branch manager, district manager, regional vice-president and executive position). The data indicates that, as seen in most organizations and occupations, entry-level positions come with the least number of responsibilities. As a person climbs the hierarchical ladder of the organization, they are laden with more duties and responsibilities. The management trainee in a roofing distributor organization has a narrow range of duties compared to the branch manager, who has a broad range of responsibilities. The entry-level positions focus more on general training to get acquainted with the nature of business and manage day-to-day sales. In contrast, higher positions are seen to be requiring more leadership and management skills. The management trainee gets a good overview of various aspects of the distribution business aided by the rotational nature of the position. The demand for leadership skills also increases depending on the level of management within the company's hierarchy. The branch manager focuses on the operations of the specific unit, while the regional vice-president oversees multiple units within the region and leads district managers. The findings for the individual positions are outlined below in *Table 1*.

Table 1

Responsibilities for various positions

Position	Responsibilities
Management Trainee	Rotational training to be a Branch Manager to gain knowledge of the overall distribution operations.
Technical Sales	Inside and outside sales to acquire new business and the role of customer consultant.

D. Gajjar et al.

Technical Services	Quantity take-offs and estimating
Branch Manager	Managing the business unit or the specific branch and all of its operations.
District Manager	Managing multiple branches, providing leadership and mentorship to branch managers.
Regional Vice-president	Managing multiple branches that are allotted within the specified region, providing leadership and mentorship to district managers.
Executive	Managing and leading operations, procurement and logistics.

Compensation

Higher compensation usually accompanies higher positions that require greater expertise and knowledge. The data collected shows a steady increase in compensation as the employee progresses in their career. From the entry-level management trainee position to the position of technical services, there is a 39% increase in compensation. However, it must be noted that technical services salary heavily depends on the number of years in the position. Focus group participants noted that some employees prefer to remain in the technical services position for their entire career, which can result in an increase in salary. On the management side, there is a considerable increase in salary from branch manager to executive, which corresponds to their experience and scope of responsibilities. The highest-paid position in a roofing distributor organization is the executive position. Compared to the management position, the sales positions have lower compensation; however, the sales team also has an opportunity to make a commission of up to \$100,000 annually on sales. Generally, the salaries for each position in the distribution sector match or exceed the industry average.

A detailed matrix of compensations and benefits for each position is outlined in Table 2.

Table	2
-------	---

Position Compensations		
Position	Average	Range
Management Trainee	\$45,000	\$40,000 - \$50,000
Technical Sales	\$47,500	\$45,000 - \$55,000
Technical Services	\$62,500	\$50,000 - \$75,000
Branch Manager	\$100,000	\$100,000 and above
District Manager	\$120,000	\$90,000 - \$150,000 and above
Regional Vice-President	\$375,000	\$250,000 - \$500,000 and above
Executive	\$375,000	\$250,000 - \$500,000 and above

Benefits

There is no variation in benefits across the career path for both the sales/services and management sectors. All positions receive the same benefits that include insurance (health, vision, dental), 401K match, bonuses (depending on the company), equity sharing (depending on the organization structure), profit sharing bonus, and paid time off. However, the technical sales position receives an additional benefit. Along with standard benefits such as insurance (health, vision, dental), 401K match, profit

sharing bonus, paid time off, and base salary, they also receive a commission. Consistent benefits are critical since it ensures the same care and coverage from the company, irrespective of any position. The benefits offered by distribution companies align with industry standards.

Experience

The experience required for entry-level positions is minimal, with more emphasis placed on training programs or college degrees. For higher positions, priority is given to those with experience. For an employee to be promoted to a higher position, they must have worked in the organization for a minimum number of years and should have proven their capabilities. The typical experience required for promotion from entry-level positions such as management trainee or technical sales to branch manager could be between four to seven years. This could be accelerated based on factors such as employee performance or company requirements. The climb from management trainee to technical services positions is not steep. It should be noted that positions often overlap in a career path. For example, a person in the position of technical services could be qualified to take up a branch manager position based on experience. The experience requirements for the individual positions are outlined below in *Table 3*.

Table 3

Experience requirements

Experience requirements		
Position	Experience required	
Management Trainee	Prior technical sales and service experience and / or a bachelor's degree or master's degree	
Technical Sales	Entry level position for roofing distributors	
Technical Services	Technical sales experience and / or a two-year associate degree	
Branch Manager	Completed management in training program, outside sales experience, additional financial understanding beyond a construction degree	
District Manager	Extensive experience as a Branch Manager	
Regional Vice- president	Extensive experience as a District Manager	
Executive	Extensive experience as a District Manager and/ or Regional	

Career Path

The typical career path within a roofing distributor company is shown in *Figure 2*. A potential worker entering the roofing distributor organization can choose either the sales/services or the management path. A recent college graduate looking for an entry-level position within roofing contracting companies would be employed as a management trainee or in the technical sales/ services position based on their background and qualification. Over time this employee will progress in rank throughout their career. Regional vice president and executive-level positions generally require extensive experience within the roofing industry.

D. Gajjar et al.



Figure 2. Visual Career Path Model

Conclusion

The main objective of this study was to clearly define and document a visual career path for the roofing distributor sector of the industry so construction management graduates could consider this sector for employment upon graduation. The entry-level positions in the sector have a narrow scope of responsibilities and are more focused on training, whereas the higher positions have a broader scope of duties. With higher positions comes the demand for leadership. While a branch manager has to be equipped to handle the workings of a particular branch, a district manager must be equipped to handle the workings of multiple branches and lead many branch managers. As seen in most organizations, compensation is higher for top managerial positions when compared to entry-level and sales/services positions. This is because of the experience and knowledge that these positions require and the higher level of responsibility attached to the position. Sales positions have comparatively lower compensation, but they get commissions on sales to compensate for some part of it. Entry-level positions require little to no prior experience and focus on training programs that can benefit from college degrees. On the other hand, higher positions rely heavily on previous experience. Employees might need to invest four to seven years in the company to get promoted to a higher managerial position. The benefits offered to all positions are the same except the technical sales position, which gets a base salary plus commission.

Roofing distribution organizations are often large firms with a large number of employees. These firms provide employees with desirable working conditions and consistent care through company benefits. Distributors play an important role in the supply chain between roofing contractors and manufacturers. Working in the distributor sector is challenging and is far from being tied to an office space or desk, which makes it a desirable option for the Gen Z population. There is freedom, job stability, mentorship and the possibility to grow in the sector. The literature review showed the importance of having a visual career path and different career positions to attract a younger workforce. This visual career path and the job responsibilities, compensation, benefits, and salary will provide Gen Z a viable career option to consider. Roofing distributors can also use the study's results to train and create awareness amongst new and existing employees. The flowchart gives a clear understanding

of the expected career trajectory within the sector.

The limitation of this study is that the focus group participants are representatives of the roofing distribution sector only in the U.S. There is still the need to analyze job responsibilities and map career paths for other distribution sectors of the construction industry. This research paves a starting point to attract and retain Gen Z sector into the roofing distribution sector. There needs to be further research to understand other factors that possibly affect and influence Gen Z career preferences.

Acknowledgments

This research was made possible through funding from the National Roofing Alliance. The views represented in this paper are the authors' and do not necessarily reflect those of the National Roofing Alliance.

References

Aggarwal, A., Sadhna, P., Gupta, S., Mittal, A., & Rastogi, S. (2020a). Gen Z entering the workforce: Restructuring HR policies and practices for fostering the task performance and organizational commitment. *Journal of Public Affairs*. https://doi.org/10.1002/pa.2535

Assaad, R., & El-adaway, I. H. (2021). Impact of Dynamic Workforce and Workplace Variables on the Productivity of the Construction Industry: New Gross Construction Productivity Indicator. *Journal of Management in Engineering*, 37(1). https://doi.org/10.1061/(asce)me.1943-5479.0000862

- Azeez, M., Gambatese, J., & Hernandez, S. (2019). What Do Construction Workers Really Want? A Study about Representation, Importance, and Perception of US Construction Occupational Rewards. *Journal of Construction Engineering and Management*, 145(7). https://doi.org/10.1061/(asce)co.1943-7862.0001669
- "BEA Industry facts". (2022). U.S Bureau of Economic Analysis.
- Baral, A., Liang, Y., Li, M., Gonzalez, M., Shahandashti, M., & Asuri, B. (2022). Impact of Covid-19 on the Diversity of the Construction Industry. *American Society of Civil Engineers*.
- Becker, K. L. (2022). We want connection and we do not mean wi-fi: examining the impacts of Covid-19 on Gen Z's work and employment outcomes. *Management Research Review*, 45(5), 684 699. https://doi.org/10.1108/MRR-01-2021-0052
- Biruk, S., Jaskowski, P., & Czarnigowska, A. (2019). Fuzzy AHP for selecting suppliers of construction materials. *IOP Conference Series: Materials Science and Engineering*, 603(3). Institute of Physics Publishing. https://doi.org/10.1088/1757-899X/603/3/032093

Callanan, G., & Perri, D. (2020). Constructing construction careers: the case for the building trades. *Education and Training*, 62(3), 201–213. https://doi.org/10.1108/ET-06-2019-0117

Carter, A. (2022). Perceptions of Construction Trade Careers Amid a Growing Labor Shortage: An *Exploratory Study*.

Cengiz, A. E., Aytekin, O., Ozdemir, I., Kusan, H., & Cabuk, A. (2017). A Multi-criteria Decision

Model for Construction Material Supplier Selection. *Procedia Engineering*, 196, 294–301. Elsevier Ltd. https://doi.org/10.1016/j.proeng.2017.07.202

- Choi, J. O., Shane, J. S., & Chih, Y.-Y. (2022). Diversity and Inclusion in the Engineering Construction Industry. *Journal of Management in Engineering*, 38(2). https://doi.org/10.1061/(asce)me.1943-5479.0001005
- Csiszárik-Kocsír, Á., & Garia-Fodor, M. (2018). Motivation analysing and preference system of choosing a workplace as segmentation criteria based on a country wide research result focus on of Z. Online Journal Modelling the New Europe, (27), 67–85. https://doi.org/10.24193/OJMNE.2018.27.03
- Goh, E., & Okumus, F. (2020). Avoiding the hospitality workforce bubble: Strategies to attract and retain generation Z talent in the hospitality workforce. *Tourism Management Perspectives*, 33. https://doi.org/10.1016/j.tmp.2019.100603
- Hiranya Delvinne, H., Hurtado, K., Smithwick, J., Lines, B., & Sullivan, K. (2020). *Construction Research Congress*.

"Industry Market Research, Reports, and Statistics" (2022). IBISWorld

Kim, S., Chang, S., & Castro-Lacouture, D. (2020). Dynamic Modeling for Analyzing Impacts of Skilled Labor Shortage on Construction Project Management. *Journal of Management in Engineering*, 36(1). https://doi.org/10.1061/(asce)me.1943-5479.0000720

lucas, jason, & gajjar, dhaval. (n.d.). Roofing Industry Career Path.

- Matthews, J. ;, Pellew, L. ;, Phua, F. ;, Rowlinson, S., Matthews, J., Pellew, L., & Phua, F. (2000). Quality relationships: partnering in the construction supply chain FULL TEXT. In *The International Journal of Quality & Reliability Management ; Bradford* (Vol. 17).
- Pandita, D. (2021). Innovation in talent management practices: creating an innovative employer branding strategy to attract generation Z. *International Journal of Innovation Science*. https://doi.org/10.1108/IJIS-10-2020-0217

"Roofers: Occupational Outlook Handbook" (2022). U.S. Bureau of Labor Statistics

Sokas, R. K., Dong, X. S., & Cain, C. T. (2019). Building a sustainable construction workforce. *International Journal of Environmental Research and Public Health*, *16*(21).