



## ***Job Profile***

### **Materials Engineer Intern**

Life Floor is a rapidly growing, Minneapolis-based start-up, that is shaking up the aquatics surfacing industry by making a flooring that people love. We believe that safety happens by design. That's why we created the ideal surface for aquatics with industry-leading traction, comfort, durability, and with infinite design possibilities. All over the world, people trust Life Floor to make their aquatic environments look and feel extraordinary. We serve customers like Great Wolf Lodge, Universal Studios, and Carnival Cruise Lines.

Life Floor tiles are made from an EVA/PE blended, closed cell, cross-linked foam. In July of 2015, Life Floor formally launched manufacturing in South Dakota, completing its on shoring efforts. Life Floor is now one of only a couple companies manufacturing this type of EVA foams in the United States. Life Floor's manufacturing is growing at approximately 100% per year. Check out our Made in the USA page on our website, [www.lifefloor.com/made-in-the-usa](http://www.lifefloor.com/made-in-the-usa), for more information. Life Floor is looking for a Material Science Engineering Intern who will take an active role in improving product quality and consistency along with improving product performance. The ideal candidate will be eager and willing to work and grow in a quickly-changing and often incredibly challenging environment.

If you feel excited about what Life Floor is doing, read the entire Job Profile. If you believe you are a good fit, please apply according to the instructions at the end.

## Our Culture

Life Floor is a company that thrives because of its culture which is centered around our values. These aren't something casual that we post on the wall and forget, but are values we elevate and hold each other accountable to every day. If you exemplify these values, you will love being a part of our team.

- **Innovation:** We are committed to radical innovation, which is driven by the needs of our customers and end users. If there is a new and better way to achieve our goals, we want to find it.
- **Integrity:** We believe doing the right thing is always the best decision. If we believe we can do something, we do it. If we do not achieve our expected results, we do our best to make things right.
- **Excellence:** We are committed to excellence in all that we do. We are always open to suggestions and constructive feedback. If there is a way we can be great instead of just good, we want to know.
- **Positivity:** We aspire to be fun and inviting. We do our best to maintain a positive attitude, and we assume positive motives, positive methods, and positive results.
- **Collaboration:** Whether within our own team or with our partners, we make things better by working together. We strongly believe in the power of teamwork, and we ask for help when we need it.
- **People:** We exist to serve our customers, employees, investors, vendors, and end-users. We are committed to manufacturing and marketing a product that makes their lives better.

## Key Characteristics of the Ideal Engineering Intern

Beyond being a cultural fit for our team, the ideal candidate will represent the following characteristics

- **Humble:** We are looking for a candidate who puts the team first. Candidates who demonstrate this are confident, but not self-centered.
- **Hungry:** Our company has a history of doubling year over year, and a plan to continue doing so. A hungry candidate is continually ready for the next challenge and looking to grow and learn as much as possible.
- **Emotionally Intelligent:** The majority of engineering advancements will be attained working with our manufacturing partners and vendors. The Engineering Intern needs to be engaged in these relationships and have good judgment in how to best accomplish Life Floor's goals while working alongside and with other companies teams.
- **Reliable:** The Engineering Intern will work independently on projects they have been assigned. They must be a self-starter and be willing to ask for guidance when needed.
- **Strategic:** The Engineering Intern must maintain awareness of the big picture to be able to ask the right questions and gather the right information to make informed data-driven recommendations.
- **Flexible:** Life Floor is still in its startup phase. As such, we work in a rapidly changing environment. The Engineering Intern must be able to adjust to changes in priority and scope of projects.
- **Organized:** Working with the CTO, the Engineering Intern will lay out a plan for the projects they are assigned and be disciplined in how they follow them and report on the plan.

## Key Relationships

The Materials Engineer Intern will fulfill position expectations through the following key relationships:

- **Chief Technical Officer:** The Materials Engineer Intern will report directly to the Chief Technical Officer, the head of the engineering division. Primary onboarding/training for this position will be from the CTO, and this position will have weekly accountability to the CTO through one-on-one meetings.
- **Manufacturing Engineer Intern:** At times it will be necessary to team up with the Manufacturing Engineer Intern to accomplish a project or just to lend a hand.
- **Operations Team:** The engineering division works closely with the operations division. As such, the Materials Engineer Intern may work with various members of the operations team including the Vice President of Operations to accomplish various manufacturing improvements.
- **Manufacturing Partners and Vendors:** The Materials Engineer Intern will collaborate with our manufacturing partners and vendors to accomplish the goals of the various engineering projects.

## Activities

### Role

### In-house Testing

### Actions

Innovation and excellence not only apply to our people but to our products as well. We want to ensure our product has the best quality, consistency, and performance possible. Having in-house testing is one of the ways to ensure we not only have the best product but that we are making the best even better. The Materials Engineer Intern will analyze the performance of the Life Floor product using the in-house test equipment, compile reports on the results and recommend changes to improve the product.

Activities demonstrating proficiency in In-house testing:

- Identify opportunities where lab testing could generate product improvements.
- Prioritize opportunities to identify the most appropriate lab projects.
- Design and present a suggested layout for internal testing lab including equipment, materials, and workspace to illustrate maximum efficiency.
- Document testing procedures and results
- Conduct tests on raw materials or finished products to ensure their quality.
- Analyze product failures to determine causes of problems and develop solutions.
- Recommend technical design or process changes to improve efficiency, quality, or performance.
- Conduct routine and non-routine analysis of in-process materials & finished goods.

## Recycling

Life Floor is committed to improving all people's lives who come in contact with our company and product. Part of this commitment is to do our part in minimizing the impact Life Floor has on the environment. The Materials Engineer Intern will participate in a project where post-production scrap can be made back into Life Floor or into another product.

Activities in the recycling project include:

- Work with outside vendors and suppliers to identify equipment and processes that can be used to recycle Life Floor in-house.
- Collaborate with other recycling companies to identify potential recycling opportunities.

## Misc Tasks

There are many miscellaneous tasks needed to be done to keep the engineering division and company running smoothly. Some tasks will be to support other divisions. The Materials Engineer Intern is an important asset in limiting distractions to other personnel allowing them to stay focused on their projects/duties.

Activities demonstrating proficiency in misc tasks:

- Reporting progress to CTO during weekly 1 on 1 meetings
- Participating in weekly divisional meetings
- Design prototyping
- Small-scale production
- Willingness to jump in and get the work done while keeping a positive attitude
- Completing the miscellaneous tasks and projects in a timely manner

## Measurements

Life Floor has a vested interest in the success of the Materials Engineer Intern. In addition to the information outlined above in the job profile, the following measurements will be utilized as the primary performance indicators. The Materials Engineer Intern/CTO will collaborate to determine the specific goals and relevant importance in each category.

### In-House Testing

#### Measurements

- Functional lab which includes a good physical layout and necessary supporting organizational systems
- Testing processes are documented
- Product improvement recommendations based on lab test results

### Recycling

#### Measurements

- Identified equipment and processes to recycle Life Floor post production scrap
- Positive relationships with outside recycling vendors

### Miscellaneous duties

#### Measurements

- Appropriate for the task

## Compensation and Term

- Full time, 40 hours per week
- Hourly compensation.
- The term of the internship is from May-August. Exact dates term to be determined.
- Intention to continue with a part-time intern position when school starts in the fall.
- Intention of offering a full-time permanent position upon graduation.

## Minimum Qualifications

- Values and culture fit
- Experience in manufacturing or materials preferred
- Currently a Junior or Senior in pursuit of an engineering degree (Manufacturing, Industrial, Materials Science, Chemical preferred)
- Experience effectively communicating over phone and email
- Familiarity with Excel/Google Sheets, Word/Google Docs, and Google Drive Preferred.
- Easily adaptable to many technological systems (messaging, cloud-sharing)
- Ability to travel approximately 15-25%
- Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.
- Mechanically inclined.

## Environment and Physical Demands

The physical demands and environment described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- General office environment in which this position includes periods of telephone and computer work that may require sitting for periods of time.
- Ability to work in a manufacturing environment.
- This position is in the Life Floor office on the 2<sup>nd</sup> floor of a building without an elevator.
- The ability to lift a 50 lbs box of tile is preferred.
- Travel to the manufacturing plant is by car which is 4 ½ hours one way.

## How to Apply

To apply, please email Resume and Cover Letter to Jason Bahrke at [jason.bahrke@lifefloor.com](mailto:jason.bahrke@lifefloor.com) with the following:

- Why you are interested in working at Life Floor.
- What you believe you will bring to the team.
- Previous examples of how you exemplified the Life Floor Core Values.
- Resume.