

## 20 Tips for Building a Climbing Wall Facility

<http://www.eldowalls.com/>

### 1. Educate yourself.

All climbing wall products are not created equal. Aesthetically and functionally, there are significant differences between products. For example, while a sculpted fiberglass climbing wall can be aesthetic, it will never be as realistic as a climbing wall built with concrete castings of [real rock](#). Additionally, the fiberglass wall will echo like a drum as people climb. Education is paramount for those [sourcing a climbing wall](#) product.

### 2. Focus on design.

While the routes are changeable, base climbing wall architecture isn't. If you want your climbing to be as enjoyable on a customer's 1,000<sup>th</sup> visit as it was on the first, place a very high emphasis on climbing wall design.

### 3. Balance form and function.

Climbing wall [aesthetics](#) and [functionality](#) may compete. In essence, the most strikingly aesthetic climbing wall will inevitably have limitations with long-term end-user satisfaction. Conversely, a climbing wall that builds long-term enthusiasm may lack in top level aesthetics. It is critical, therefore, that the development team considers the balance between form and function when selecting a product. We feel you can have your wall and climb it too...but this concept often eludes many planning efforts.

### 4. Higher climbing walls aren't necessarily better.

While height is a great in a climbing feature, there are some severe limitations to building excessively high. We find that the ideal height is between 30 – 40 ft in height. Keep in mind that higher walls:

- Cost more due to structural requirements and installation limitations
- Limit climber capacity...the same size wall if not as tall would have more climbing wall width
- Decrease participant turn-over, because climbers are on route longer
- Cost more to operate...setting routes above ladder height increases setting time exponentially.

### 5. Understand which climbing wall features drive wall price.

Elements that can increase the price of your wall include: rock realism, climbing wall height, self-supporting structures, structural decks topping climbing features, areas of installation with poor access...and more.

### 6. Think about the space.

Climbing walls are 3-dimensional. While climbing walls require little space relative to other activities (such as basketball or swimming), most planners under-estimate the space required to make "really good" climbing walls. Beyond the depth behind the climbing wall required for servicing, ample depth must be given for overhangs, slabs and belay ledges. Safe fall zones must also be considered.

### 7. And think about the space some more.

Climbing wall floor space requirements are greater than simple climbing wall and fall-zone requirements: Programming (class) usage, customer traffic, resting and social areas must also be considered.

### 8. Use the right flooring.

Standard athletic flooring is not an option for a climbing wall. A fall attenuation standard doesn't currently exist in the climbing industry, so many planners let aesthetics (or playground standards) drive the choice. Since a fall can occur that is substantially higher than a ten-foot playground fall, one should pull out all stops. Use only what is [proven effective](#).

### 9. Successful programs require ongoing effort.

Build it and they will come? Doubtful. Most facilities operators believe that when you install a climbing wall, the effort is done. They don't understand the ongoing effort required to build a successful program. A successful program is built on frequent and creative route turnover and strong programming offerings, among other things.

### 10. Vary your offerings.

Bouldering, lead climbing, and [auto belay](#) units should be considered on all installations. Bouldering and auto belay units open up climbing for the single climber. Auto belay units also displace the cost of belayers for classes. Lead climbing offerings expand programming and allow for more advanced usage.

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### 11. More handhold fastener density means happier climbers.

High [handhold](#) fastener density = better routes = more member enthusiasm. Low handhold fastener density = limitations to route setting = loss in climber enthusiasm.

### 12. Look at large diameter belay bars.

Large diameter belay bars (top-rope bars) are safer than double point anchors. In addition to reducing rope wear, the larger contact area allows belayers to better control falling climbers...especially when there is a large weight disparity.

### 13. Train your customers.

Customer training is paramount. A climbing wall's greatest risk exposure is due to pilot error, usually someone that didn't tie in or install their harness correctly or a fall due to an inattentive belayer. Also the injury isn't always to the falling climber - it may be to the person being fallen upon.

### 14. Think about maintenance.

When selecting a [flooring system](#), changing light bulbs and servicing HVAC equipment should be considered.

### 15. Don't overlook air handling...

Many facilities planners overlook the air handling issues of a climbing wall: namely air de-stratification and chalk dust mitigation. Temperatures can be 30 degrees warmer at the top of the wall, making climbing a very unpleasant experience. Additionally, chalk dust can be an overwhelming problem – especially if located next to a hard court or centralized clerestory. Few HVAC designers know what they are getting themselves into.

### 16. or lighting.

Many facilities planners leave lighting in the climbing area as an afterthought. Lighting a climbing wall can be a difficult proposition: Reverse lighting doesn't work due to chalk dust. General lighting may not be sufficient under large overhangs. Spot lighting, if not located correctly, can blind climbers or belayers. Few lighting designers know what they are getting themselves into...and would run screaming if they did!

### 17. Think about instructional use.

Instructional use should be considered very early in the climbing wall design. Climbing can be very intimidating to beginners. In this sense, an instructional area that offers some sense of privacy will be more successful and will generate faster participant growth.

### 18. Make space for logistics.

In addition to the climbing wall area, thought must be given to class and participant logistics. For example, where would clients sign waivers and put on harnesses in a class with 20 participants. If not considered in advance, this could overwhelm the front desk or could limit class size.

### 19. Check references.

All climbing wall manufacturers are not created equal. It is important to work with a company that will be reliable, responsive and dedicated to high quality. Always ask for [customer references](#) and, if possible visit a site where the manufacturer has installed a wall.

### 20. Hire Eldorado Climbing Walls!

[Eldorado Climbing Walls](#) is committed to delivering the finest rock climbing walls available. We strive to provide the best climbing wall solutions by offering turn-key systems including equipment, in-depth training, and continuing support with all of our rock climbing walls. With hundreds of successful projects nationwide, we have the experience to meet your needs.