



KERSPLASH™ POOL CLIMBING WALL
GUIDELINES AND SAFETY OVERVIEW

BY TOM GRIFFITHS, EDD
AQUATIC SAFETY RESEARCH GROUP



EVERLAST CLIMBING™

A PLAYCORE® Company

GENERAL GUIDELINES

Safety, enjoyment and fitness should be the mutually beneficial goals of the Kersplash™ Climbing Wall. In order to accomplish these goals, the walls must be installed correctly, used by climbers appropriately, and guarded by lifeguards closely. When installed, used, and supervised properly, the Kersplash™ Climbing Wall systems offer the following safety benefits:

- The climbing wall is designed to angle out over the water to promote safety by aligning the climber's center of gravity away from the pool deck and towards the pool water. When installed and utilized as intended, climbers are not able to fall from the climbing surface onto the surrounding deck.
- The landing area and points of entry into the water are significantly smaller for the climbing wall than diving boards and some slides because climbers are unable to propel themselves out into or out over the pool. This reduces the chance for in-water collisions and provides improved supervision conditions for the lifeguard who can be in close proximity to participants.
- The climbing wall is designed for feet first entry. Climbers are instructed through signage to land feet first in the water with knees bent and arms extended for deceleration and added safety. Head first entries are not only difficult to accomplish but are repeatedly banned through signage and supervision. It is difficult to rotate to a head-first dive or entry because the hand-holds and foot-holds do not offer a substantial enough base to accomplish a dive. Feet first entries are safer than dives because body alignment allows for faster deceleration into the water and since the head is last to enter, it is more protected.

RULES FOR USE

Climbers must understand, appreciate and abide by some very simple yet important rules. These rules are provided in the installation information and should be provided throughout the facility, at the front desk, and in a hand-out patrons receive when they first enter the aquatic facility.

- Swimmers only may use the Kersplash Climbing Wall; non-swimmers and beginners should not use the wall.
- Swimming ability should be determined by a 25 yard swim and a 30 second treading exercise.
- Climbers must read, understand, and obey all posted rules, instructions and warnings.
- Only one climber is allowed on the climbing wall at a time.
- Only feet-first entries are allowed when entering in the water. **NO EXCEPTIONS!**
- Climbers who intentionally violate the **NO DIVING** rule **WILL BE BANNED** from using the climbing wall.
- When entering the water, knees should be bent and arms extended for safety through increased deceleration.
- The entrance and exit paths dictated by the aquatic facility must be followed.
- When the climbing wall is open for use, a lifeguard must supervise the use of the structure without performing any other duties or observations.
- Climbers may not use the wall without the direct supervision of a lifeguard in close proximity of the structure.
- Climbers must listen to and obey the lifeguards monitoring the structure.
- Climb must begin from the water.
- Diving may result in bodily injury or death.
- Swim away from the climbing wall drop zone when you are done with your climb.
- Report any damaged equipment to the supervisor.

FACILITY REQUIREMENTS

WATER DEPTHS

Most competitive swimming, diving and water safety organizations require a five feet depth to perform head-first racing dives into swimming pools. Our climbing wall requires a minimum of five feet for feet first entries of climbers, although deeper depths are recommended when available for taller structures. As the height of the climbing increases with the addition of vertical panels, minimum water depth requirements will also increase. To promote safety of climbers, Kersplash has applied commonly accepted safe head-first diving depths to feet-first entries, providing an extra layer of protection for participants.

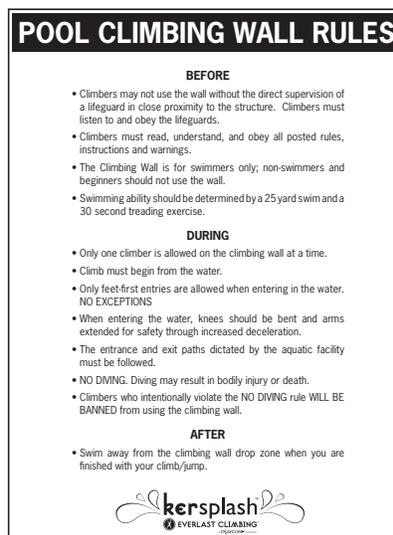
It must be understood that 95% of all serious head first entries (“dives”) occur in depths of water less than five feet deep. By combining feet-first entries into depths of water that are progressively deeper than five feet, the safety of the climber increases, provided they fall or jump into the water feet first. Entering with knees bent and arms extended is also a rule that promotes safety through increased deceleration. Visual warnings using both international symbols and verbiage as well as voice instructions promote these climbing best practices.

DECK CLEARANCES

As with most swimming pool apparatus placed on the pool deck, the more space provided around the support structure, the better. Five feet of deck space should be maintained between the ends of the support structure and the perimeter pool wall or fence. If less than five feet is available, patrons/pedestrians must be kept from walking or congregating behind the structure. This can be accomplished in a variety of inexpensive yet practical measures like traffic cones, stanchions, and other control devices. When it comes to individuals with disabilities, a minimum of four feet clearance around the support structures should be maintained. Stanchions and cones are always recommended, regardless of pool deck space, as they minimize the risk of people coming into contact with the structure and injuring themselves or distracting climbers on the wall itself. Facility Operators are advised to check building and fire codes to determine whether support structures can permissibly block access to the pool deck, particularly in cases where the support structure would come within three feet of a wall. Transparent climbing walls do not create visual obstruction for surveillance of other vitally important areas of the pool that also must be monitored. Non-transparent climbing walls may need added supervision around the structure.

SIGNAGE

The best way to approach signage is through the “Three Strikes and You’re Out” philosophy. Pool patrons should have three opportunities to read about the Climbing Wall: once when they enter the facility, once just prior to mounting the wall, and finally, when they are climbing on the structure. Kersplash provides a set of three signs with each pool wall purchased. The primary sign provides a complete set of rules and guidelines and should be posted when patrons enter the aquatic area. The second sign is for use as patrons near the Kersplash wall and repeats the rules. The third form of signage uses primarily symbols to reinforce the rules. These signs feature warning shapes and colors and mimic the universally and internationally accepted yellow “danger” diamond. The International “DO NOT” symbol - red circle with slash - is used to ban prohibited activities. These signs should be affixed where the climber can see them while they are on the wall. Lastly, when the climbing wall is closed for use, or the facility is closed to the public, it is recommended that a “Wall Closed” warning sign be used.



LIFEGUARDING RECOMMENDATIONS

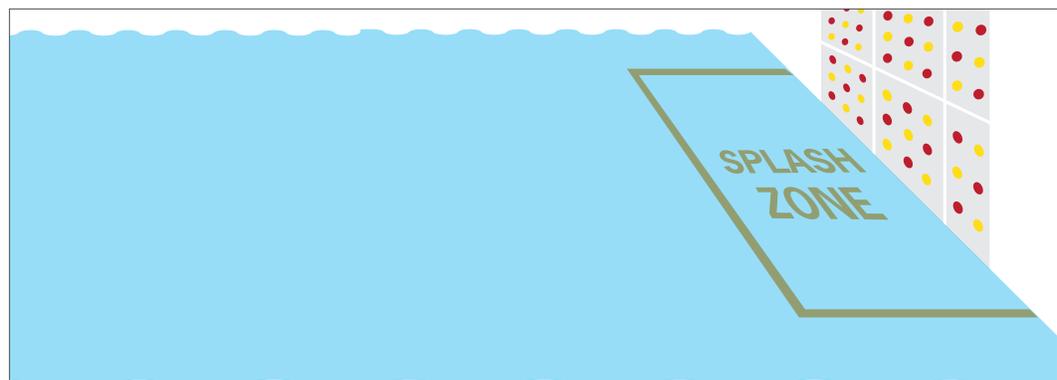
Like diving boards and slides, whenever the climbing wall is in use, the climbing structure must be guarded by a competent and confident lifeguard that is properly trained and certified. The lifeguard should be specifically assigned to the climbing wall to enforce appropriate use of the structure without other surveillance or secondary duties. The lifeguard should be properly dressed and stationed and have on their person a whistle and rescue tube as well as Personal Protection Devices (PPE). Lifeguards guarding Kersplash should have experience climbing the wall prior to guarding the structure, and be familiar with the rules recommended in this document. The lifeguard should be stationed alongside the structure in close proximity to the wall to control the use of the wall and minimize misbehavior. The standing position is preferred over the sitting position to maintain better control of the wall and its climbers.

Shallow water lifeguards are not acceptable for this amenity because the apparatus is placed in deeper water. The lifeguard should be positioned close to the wall with an unobstructed view of the wall and drop zone below. The lifeguard must completely understand the rules and regulations of climbing wall use and enforce them. Although the lifeguard(s) may speak to the climbers to coach them, their attention must not be diverted from the participants using the wall. Lifeguard orientations, in-service trainings and emergency action plans should include the climbing wall and should be reviewed and practiced regularly (monthly is highly recommended). Each facility should determine where to best position supervisory staff to ensure a full and unobstructed view of the climbing wall and the drop zone, and allow for maintained voice contact with the participants.

The aquatic facility should also establish an entrance and exit pattern (left to right and right to left) to avoid congestion of swimmers waiting to swim into the drop zone to begin their ascent on the wall. Climbing walls are intended for use by one climber at a time. Larger climbing walls may allow use by more than one participant at a time. However, extra safety precautions must be put in place to prevent collisions in the drop zone.

THE DROP ZONE

A safety drop zone must be maintained in front of and to the sides of the structure. Climbers must not come into contact or in close proximity to people in this drop zone. A distance of ten feet in front of the structure and five feet to the sides is recommended. The lifeguard on duty must maintain the safety drop zone by keeping other swimmers out of it and directing all climbers who fall or drop into the water to exit the areas as quickly as possible. Painted boundary lines on the bottom of the pool would help in this regard. Buoyant lines on the surface may also be used to identify the drop zone but they could become problematic if children attempt to hang or sit on them or if climbers attempt to grab them on the way down to the pool. Entry and exit points should be determined and followed.



NUMBER OF CLIMBERS

It is highly recommended that only one climber use the Climbing Wall at a time. Depending on the size of the structure, however, there may be an opportunity to allow more than one climber on the wall at the same time. Multiple climbers should only be allowed when there is no possibility of one climber either interfering with or falling on top of another climber. Multiple climbers should be instructed to climb the wall vertically rather than to traverse the wall horizontally where they could come into conflict with another climber. Climbers should also maintain a distance of at least one panel from other climbers to minimize the risk of climber interference, horseplay and accidental concurrent falls.

FOR SWIMMERS ONLY APPARATUS

In the U.S swimming pool industry, shallow water is defined as water with a depth of five feet or less. Deep water is defined as water deeper than five feet. It is important to understand that most children under the age of 12 years are less than five feet tall to the top or crown of the head. Since the Kersplash Climbing Wall is located in deep water, this climbing structure must be limited to swimmers only. Swimmers should be identified through a swim test and a wrist band. Non-swimmers not only must be prohibited from using the climbing wall but should also be required to wear a lifejacket.

On rare occasions, the aesthetically pleasing structure may attract younger, weaker swimmers to the climbing wall. This has occurred with colorful drop slides into very deep water. As a result, all persons should be properly screened to ensure they possess the requisite deep-water skills necessary for using the structure. As a follow up point, all pools should adopt a “Note and Float” policy for all patrons so that all-non swimmers are identified and then placed in USCG approved Type III Lifejackets. Swim tests should be conducted for all patrons entering the swimming pool or water park, but this is particularly true for anyone wishing to use pool-side climbing structures. Depending on the pool size, swimming the length or width of the pool is recommended with a treading water exercise for 30-60 seconds. As an additional safety measure, swim tests should be conducted in chest-deep water.

UNDERWATER ACTIVITIES IN THE DROP ZONE

Playing in the water within the drop zone must be prohibited. Potential climbers should not be allowed to play with the structure itself, particularly while submerged. Underwater activities in the drop zone could hide the swimmer from the lifeguard and climber on the wall, leading to a collision. While there are no hidden hazards or entrapment potentials inherent in the Kersplash, it is intended for above-water use. The wall is mounted directly to the pool wall preventing swimmers from getting behind the wall while in the water. It is not intended or designed for underwater use by climbers or swimmers. Playing underwater around the structure makes it more difficult for the lifeguard to properly supervise the activity. This could lead to injury should a climber fall onto someone who was playing underwater in the drop zone.