

SAFETY TIPS FOR SUSPENDED EQUIPMENT

Sensory integration therapy is not inherently dangerous, but every activity has certain elements of risk. Precautions can be taken, however, which will eliminate most hazards. Southpaw is committed to helping its customers develop a comprehensive safety strategy. We believe the elements of comprehensive safety include the layout of the clinic or therapy space, the installation of ceiling eyebolt supports to the proper specification, the implementation of a systematic equipment inspection program, proper matting and personal protection.

Ceiling Support Information

In spite of the fact that there are so many different types of ceiling structures, there is a standard rule which should be met.

Your ceiling support should be able to support at least a 1000-pound working load* at up to 6 feet from any wall or obstruction and a 45-degree angle in any direction.

Remember that during treatment activities, the forces acting on the ceiling eyebolt will not always be straight down. Even a gentle swing on the equipment varies the angle of those forces on the ceiling support point. There should be no more than 1/4" of movement in your eyebolt, which is up to and inclusive of the stated 1000 lb., 45-degree pull.

A ceiling eyebolt which moves back and forth more than 1/4-inch under any load is UNSAFE. If the eyebolt rotates under any load, it is UNSAFE.

Your ceiling support point should meet these standards no matter what population you treat or the manner in which you treat them. As children progress through S.I. therapy, they put an ever-larger strain on the equipment and ceiling eyebolts. The unique needs of each child you treat may call for different levels of activity. A clinic that currently serves only children who passively swing may serve a completely different population in one, two, or three years. Quite often the therapist must demonstrate the activity to the child, or even participate in the activity **WITH** the child. Accordingly, the ceiling support must be designed around the most rigorous environment, NOT necessarily the current one.

Working Load:

Simply put, the working load is the combined weight of the equipment, the child and/or therapist on it, and the weight created by movement. For example, if a 150 pound person stands on a scale, it will read 150 pounds. Now, if that person jumps on the scale, the reading will momentarily shoot way past 150 pounds -- possibly even 300 or 350 pounds! That is an example of weight created by movement, the result of which is the working load exerted on the scale. The working load is **NOT** the number at which the equipment will fail, but rather it is the maximum sustainable load that the equipment can handle.

In summary:

Your ceiling support should be able to support at least a 1000-pound load at up to a 45-degree angle in any direction.

There should be no rotation and zero- or minimal movement in the ceiling eyebolt under any load.

A ceiling eyebolt which moves back and forth more than 1/4-inch or rotates is **UNSAFE**. Once installed, scheduled inspections and maintenance should be carried out.

LAYOUT OF THE CLINIC OR THERAPY SPACE

When organizing your treatment room(s), consider the following issues:

- Are there unique areas for each element of therapy, or does my space need to be truly multi-purpose?
- Is there an existing ceiling support point? If so, do they meet the criteria listed below for safe operation?
- If there are no existing ceiling supports, you will need to determine the type of ceiling/roof construction you have and find out if it will support the required load.
- Are there any hanging light fixtures or sprinkler systems that are in the way?
- Are there any room variations, i.e. columns, radiators, windows, doors, or other fixtures that may interfere with treatment?
- How many therapists will be using the room(s)? Will they interfere with each other during treatment?
- Are the therapists properly trained to inspect all the equipment they will be expected to use?
- What type of therapy will be taking place in each room?
- What types of clients will be treated? Now? In the future?
- Is there at least six feet of clearance from each wall?
- What is the room size:

Width: _____ feet _____ inches

Length: _____ feet _____ inches

Height: _____ feet _____ inches

This list is by no means all-inclusive, but answering these questions will help you to ***begin*** to incorporate safety as part of your treatment program from the start.

Proper Matting and Personal Protection

Matting:

Some questions we often receive are: "What kind of mats do I need?" "How thick should they be?" And "How many do I need?" Our answer is invariably to get the best, thickest mats that you can afford and get as many as possible. Matting is often an afterthought when it comes to purchasing S.I. equipment, but if safety is a priority (and it should be) then proper matting must be considered up front. What kind of suspended activities do you do with your clients? Do you do mostly linear swinging, rotation, or a mix? Do they swing very high? Where do these activities take place? Once you have answered these questions, you will have a good idea of the floor space that you will need to cover with mats during the child's swinging activities, and how thick the mats should be.

Personal Protection:

Southpaw recommends that all suspended activities be performed with a helmet. This is more important in situations where floor matting is less than optimal. We realize that some kids with tactile sensitivity will resist or refuse to do so. In those cases the therapist will need to evaluate the risks of the activity with the benefits, and possibly modify the treatment for optimum treatment success *and* safety.

