A $12.8 MILLION BUILDING project was recently completed at the U.S. Olympic Training Center in Colorado Springs, Colorado. Designed to improve the level of service provided to resident and camp athletes, this project includes a 48,000-sq-ft aquatics center and a 54,000-sq-ft gymnasiaum. The new training center strength and conditioning facility is located in this gymnasiaum.

The Colorado Springs based training center opened in 1978. The first training center weight room opened that same year and was located on the first floor of what is now the Sports Science and Technology building, in an area covering approximately 3,000 square feet. The facility was supervised by coaches during those times when their team trained.

In 1982 the weight training facility was moved into the basement of the Sports Center, an area of approximately 5,000 square feet. Supervision was provided by students on a semester’s intern program. Beginning in May 1992 a year-long research assistant position was assigned to supervise the weight training facility. This evolved into a permanent position in January 1993.

Relocation of the weight training facility to the new gymnasiaum in August 1993 is representative of an increased emphasis on strength and conditioning at the Olympic Training Center.

During the past several months a number of other improvements have been made to this facility. For example, 23 pieces of free-weight equipment and 25 selectorized machines have been added during the past year. In addition, a plyometric training area has been established, allowing for a greater emphasis on speed and power training.

Along with the creation of the permanent strength and conditioning coach position, these improvements have significantly enhanced the ability to condition the athletes who use the facility.

The present weight training facility is approximately 5,600 square feet in size. The equipment is organized to allow for 8 training zones within the room:

1. The Olympic-style lifting zone includes four platforms, complete with competition bars and bumper plates for each platform (Figure 1).
2. The lower body zone includes squat and power racks, plate loaded hip sled, leg press, hack squat, and calf machines, as well as selectorized leg press, knee extension, knee curl, abductor, and adductor machines.
3. The upper body zone includes bench, incline, and shoulder press benches; flat, incline, and decline work benches for dumbbell exercises; dumbbells from 5 to 100 lbs; and selectorized chest press, rotary chest, rotary deltoid, rotary latissimus dorsi, biceps, and triceps machines.
4. The trunk zone includes selectorized upper and lower abdominal machines, standing rotary torso, and back extension machines, as well as hanging knee/leg-lift bench, slant boards, decline bench, adjustable decline bench, roman chairs, and neck machine.
5. The upper back zone includes selectorized high and low pulley machines, a seated row, a plate loaded incline row machine, and a pull-up station.
6. The circuit training zone includes chest press, quad...
press, stair climber, shoulder press, lat pull, knee extension, exercise bike, knee curl, rotary chest, horizontal row, calf raise, biceps, upper body ergometer, and triceps machines.

7. The plyometric zone includes a 16' x 40' area for all plyometric training activities, plyometric boxes, plyo shuttle, 8- to 16-lb medicine balls, and weighted jump ropes.

8. The aerobic zone includes six stationary bicycles, five stair climbers, and a rowing machine.

This zone concept was selected for two reasons. First, it is easier to supervise the athletes as they proceed through their workouts. When they are training their legs, for example, since all the leg machines are in the same area, each athlete will be training in the same general location in the weight room. Second, the use of zones enhances program organization because the athletes are able to progress from one zone to the next as they proceed with their workout. Every aspect of the strength and conditioning program should be well organized, including the layout of the training facility.

The importance of supervision was also considered when locating the strength and conditioning coordinator's office. It was determined that this office should be in the weight training facility rather than in an adjoining area. This location was chosen to allow visual contact with all areas of the facility.

While there are varying opinions in regard to window placement in a weight training facility, it was deemed important to provide natural lighting. This was accomplished with three windows the size of garage doors along the south wall of the weight room. Not only does this allow natural lighting in the facility but also ease of movement of equipment in and out of the building, since the windows slide open like garage doors to allow access.

The rubberized flooring used throughout the weight room was selected because of its durability. In the plyometric training area, gymnastic flooring was placed on top of the rubber flooring and a solid mat was placed on top of the gymnastic flooring. This combination provides a surface that is soft enough to help reduce injuries but not so soft as to significantly increase the amortization phase in plyometric training.

One of the more popular features of the new weight room is the stereo sound system, which utilizes a portable stereo unit connected to speakers installed in the ceiling. It gives athletes the opportunity to listen to compact discs or tapes while they train, and also includes a PA unit for addressing large groups.

Primary users of the facility are...
Resident athletes of the training center—archers, figure skaters, Greco-Roman wrestlers, gymnasts, pistol and rifle shooters, and taekwondo and judo athletes. Secondary users (Figure 2) include camp athletes, primarily from the various Olympic sports. In addition, the facility also functions as a wellness center for employees of the training center.

The facility is supervised by one full-time strength and conditioning coordinator and one intern. Hours of operation are Monday through Friday from 8 a.m. to 7 p.m., and Saturday from 10 a.m. to 1 p.m. Access to the weight training facility is limited during those times when resident teams are scheduled to train.

The new weight training facility has been very well received; nevertheless, efforts are being made to continually upgrade the facility in order to provide the highest level of service possible to our Olympic athletes.

Figure 2 Residents and camp athletes are the primary users of the resistance training facility at the Olympic Training Center.

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