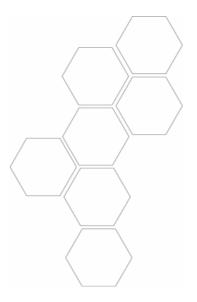


Sport Application Hand Book



1.800.237.2271 | VersaClimber 1411 E. Wilshire Ave Santa Ana, CA 92705 Visit us online: VersaClimber.com

Table of Contents

1.	Introduction	2
2.	Exercise Precautions And Medical Considerations	4
3.	Specificity of Sports (Energy System Development)	4
4.	Guidelines For Safe Exercise On The VersaClimber How to use the VersaClimber How to use Hydraulic Resistance VersaClimber Models How to use Heart Rate Monitoring VersaClimber Models Using Heart Rate as a guideline How to use Sport/Rehab Model VersaClimber During Rehabilitation Additional guidelines	5 5 6-7 8
5.	Current Exercises The VersaClimber Can Replace	10-11

>>Click on the sport of interest.

6.	Sport Specific Training Programs	12
	Baseball	
	Basketball	14
	Boxing	15
	Cycling (long distance)	
	Cycling (sprint)	17
	Fencing	
	Field Hockey (field players)	19
	Field Hockey (goalie)	
	Football	21
	Golf	22
	Gymnastics	23
	Ice Hockey (forwards/defense)	
	Ice Hockey (goalie)	25
	Ice Skating	
	Jet Ski Racing	27
	Motor Sports (drag)	
	Motor Sports (endurance)	29
	Power Walking	30
	Rowing	31
	Sailing	32
	Skiing (slalom, jumping, downhill)	33
	Skiing (cross country)	34
	Soccer (goalie)	35
	Soccer (halfback, fullback)	36
	Softball	37
	Speed Skating	38
	Surfing	39
	Swimming (50 yd, diving)	40
	Swimming (100 yd)	41

Swimming (200 yd)	
Swimming (400,500 yd)	
Swimming (1500,1650 yd)	
Tennis	
Track (field events)	
Track (100/220 yd)	
Track (440 yd)	
Track (880 yd)	
Track (1 mile)	
Track (cross country)	
Track (marathon)	
Triathlon	
Volleyball	
Wrestling	
Definition of Training Terms	

Introduction

7.

There are athletes at all levels in every sport that have not developed to their full potential. The athlete's development can be greatly enhanced and the likelihood for injuries reduced. This involves a very specific and progressive methodology for each individual athlete/sport, which integrates various technologies, exercise prescriptions, and restorative tactics. Restoration, while often overlooked, is just as important as other components of the training process.

The purpose of this handbook:

The VersaClimber training handbook was written to help the performance specialist, trainer, coach, and athlete achieve specific energy system development (ESD) goals while reducing the potential for overuse injuries.

In developing this handbook, we worked closely with performance specialists and trainers of elite athletes that have used the VersaClimber as an essential part of their training regimen. When these performance specialists and trainers developed their programs, they utilized the theory of specificity which states: "Maximum benefit of the training stimulus can only be obtained when it replicates the movements and energy systems involved in the sport."

The VersaClimber is the only machine that integrates both the upper and lower body for very specific and demanding ESD similar to sprinting or running without the joint stress of sprinting and running. Furthermore, the VersaClimber has no top end which allows endless maximal or near maximal efforts unlike bikes, steppers, ellipticals and most treadmills. This makes the VersaClimber an ideal tool to implement for high intensity ESD workouts and also an excellent active restoration modality on lower intensity training days.

Athletic sports training has changed dramatically in recent years. Let's look at a couple examples:

Scenario #1

Anaerobic team sport athletes such as football and basketball players perform exercises for strength/power, agility, speed, and ESD. It is not uncommon for these athletes to perform various Olympic related lifts, strength exercises such as squats and the like, jumping and other plyometric exercises, agility drills, and sprints for speed. Add additional sprinting as ESD for anaerobic capacity purposes and sport-specific practice or pickup games on top of all of this and it is not difficult to see the possibility for overuse injuries resulting from cumulative micro trauma.

Scenario #2

Aerobic athletes such as distance runners can put tremendous stress on their joints with high volume running programs. If these athletes are informed, they also perform strength/power training for injury prevention and enhanced performance.

Both of these above scenarios can eventually lead to overuse injuries from cumulative micro trauma. Alternatively, the athlete may have a minor injury and continue to "train through" this injury which eventually can result in faulty mechanics that can lead to a major injury or reduced sport performance. Certainly, if one stops, starts, changes directions, and sprints in the sport one should also prepare the body for this activity in training. Similarly, the distance runner must run to prepare to run. However, stressors are cumulative and there is a point where the body can no longer tolerate the cumulative stress and a breakdown occurs. It is important to avoid this in the first place. The goal is to have highly prepared and healthy athletes ready to give their best performance on "game day" or "race day."

The VersaClimber is the ideal tool to implement for high intensity ESD workouts, which avoid the joint stress of sprinting or running. The VersaClimber is also the ideal active restoration modality to use on low intensity training days. No other equipment modality offers the option of intense ESD integrating upper and lower body similar to sprinting or running without joint stress. Thus, the VersaClimber is an exceptional tool to use for anaerobic power, anaerobic capacity, aerobic power, and aerobic capacity in a low impact mechanically similar activity to sprinting or running. And most sports involve sprinting and running. Ever see anybody ride a bike in a football or basketball game?

No athlete can outperform the VersaClimber because as the athlete improves there is always another higher level challenging workout. You can continue to safely increase the intensity of the program for the athlete. Other devices have a top end that elite athletes can achieve easily. The VersaClimber is a time efficient machine that can safely train any athlete specifically for any sport in a reduced amount of time.

This handbook will specifically help you develop programs that will produce the following results:

- 1. Improved conditioning for injury prevention.
- 2. Prevent de-conditioning from occurring while recovering from an injury.
- 3. Create safe conditioning programs that will not aggravate current injuries.
- 4. Increased athlete's ability to exert maximum effort and reducing recovery times throughout their event.
- 5. Provide both aerobic and anaerobic conditioning programs that are non-traumatic and full body.

6. Prescribe conditioning programs that are specific to the sport and position.

To use this handbook: Simply look up the specific sport (find their position if available), and then use the VersaClimber as recommended. Go to "Definition of Training Terms" on pages 56-57 for explanation of training terms in training programs. If you need additional assistance to develop a training program, we are available for consulting and guidance pertaining to our equipment and it's applications. We welcome you to alter or adjust the programs to meet specific performance goals. Please remember to use these programs in conjunction with the fitness and conditioning guidelines of the ACSM. The VersaClimber may not replace all other training methods, but adding it to your current regimen will assure an increase in fitness levels for your athletes. We can assure you that you can take your athletes to an ever-increasing level of fitness, safely on the VersaClimber.

Dedicated to improved fitness. 1.800.237.2271

Exercise Precautions and Medical Considerations

Heart Rate, Inc. has spent many years developing the VersaClimber, a state of the art exercise and rehabilitation machine. We have also spent many hours working with professional athletic trainers and conditioning coaches to develop these exercises. The routines that we have developed have been designed in a basic and generic manner and should be used to facilitate gradual and continuing changes in physical fitness. Remember to use the ACSM guidelines when developing training programs.

 \rightarrow It is important to understand that the user should consult a physician prior to physical activities. Users should also work with a sports medicine professional in developing an exercise and rehabilitation program.

Specificity of Sports Energy System Development

The demands required on the athlete because of the sport may cause them to perform periods of aerobic exercise, anaerobic exercise, and rest periods during their particular sporting event. Their ability to develop and maximize performance during these periods while minimizing their recovery time will be a contributing factor to their athletic success. The way to increase performance is by training the Energy System, recovery and active or passive rest periods that are specific to the demands of the sport.

Example: during a game, a football player performs anaerobic tasks (running and making a tackle), active recovery (jogs back to the huddle), and rest period (stands in the huddle). These kinds of training intervals can be recreated on the VersaClimber. The advantage of the VersaClimber is that you can improve the athlete's total body (upper & lower limbs) conditioning without being hard on the joints. You may currently have your players doing wind sprints to increase their fitness level, where the pounding on the knees and ankles can cause

injury. And if the player already has an injury they may not be able to complete the exercise at full intensity, which they can by using the VersaClimber.

As you know, training and conditioning the body is a science and we have made it easy for you. In this handbook, we provide suggestions that will improve the aerobic and anaerobic conditioning of the athlete for their specific Energy Systems demands.

Guidelines for Safe Exercise on the VersaClimber

How to use the VersaClimber:

The VersaClimber is designed for the athlete to stand vertically erect, and in an upright posture, on two-foot pedals, holding two hand grips. The machine is built at a 75 degree climb angle that serves to decrease the isolated weight bearing on the knees, slightly unload the lower back, and to distribute the load more equitably throughout the entire torso.

In order to initiate the climbing motion, first step on the lower pedal and hold the lower handgrip. Then step onto the higher pedal and hold the higher grip. Level the foot pedals and adjust the handgrips to shoulder height. Turn on the display by pressing the on/off switch. If the display is already on, turn the switch off, then back on to reset.

→ IMPORTANT-THE FIRST TIME USER SHOULD:

- 1. Be able to complete the "Aerobic Climbing Program" 3 times a week at their target heart rate before performing the "Interval Sprint Program."
- 2. Start by using no resistance
- 3. Taking short 4-6 inch steps, like jogging in place. To increase the workload, increase the stepping speed or increase the step height.
- 4. Have no resistance while climbing for first few sessions.

How to use Hydraulic Resistance VersaClimber Models:

The knob located near the bottom of the electronic display module can identify hydraulic resistance models. The knob is used to adjust the speed of motion. The athlete can vary the resistive force by pushing or pulling harder or easier against the set speed. To increase the speed (reduce the resistance) turn the knob counter clockwise, to reduce the speed (increase the resistance) turn the knob clockwise.

Hydraulic resistance allows the trainer to control the speed and/or resistance of climbing. Increasing the resistance serves the following functions:

- Increases resistance during climbing.
- Decrease the speed of climbing.
- Produce desired sport specific speed/force of movement

In order to reproduce resistance level for future bouts, close knob completely clockwise, then open counter clockwise to desire level. This allows repeatability.

Caution: It is recommended that you begin all first time users at no resistance and when you decide to increase the resistance, increase it slowly over a number exercise sessions.

How to use Heart Rate Monitoring VersaClimber Models:

A wireless chest strap transmitter is worn to send heart rate signals to the display module. You can use heart rate as a speedometer of exercise on this model.

Select the heart rate training goal on the module and assure that a heart rate signal is displayed on the module. A goal climbing speed and an actual climbing speed will be shown on the display. Start climbing at a speed to match the actual to the goal speed. The goal speed will be updated every 30 seconds based on heart rate monitor inputs. Follow the climbing speed indicator and after an 8 to 10 minute warm up the athlete will be at their target heart rate. The climb rate will automatically increase or decrease to keep the athlete at their selected heart rate training goal.

Using Heart Rate as a guideline:

Experts agree that one of the most difficult problems in designing exercise programs is to establish appropriate exercise intensity. The American College of Sports Medicine (ACSM) recommends an individual exercise prescription and adequate monitoring to ensure that the maximum prescribed intensity is not exceeded.

Functional Capacity can be defined as the ability to perform work, and has a direct relationship with fitness levels. The intensity of exercise may be expressed as a percentage of functional capacity (VO2 max). The percentage of functional capacity that an individual is able to sustain for a specified conditioning period varies widely. For example: a well conditioned marathon runner can maintain 80% of their functional capacities for hours, while less conditioned people are fatigued in minutes.

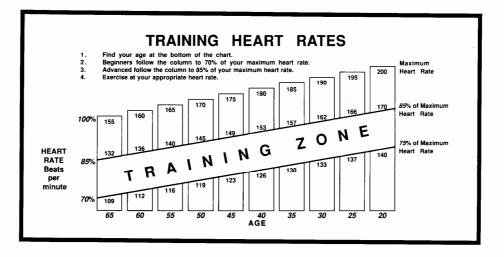
The optimal method for determining exercise heart rate should be based on directly measured objective data gathered during an exercise stress test. This includes maximum heart rate, maximum blood pressure, and maximum oxygen consumption (VO2 max.). The American College of Sport Medicine has very specific guidelines pertaining to exercise prescriptions using these methods, and it is recommended that if you are intending to train people on the VersaClimber that are at both ends of the fitness spectrum (sedentary to highly trained), that consideration be given towards obtaining this information.

When using age related heart rate rather than laboratory stress test data, we recommend that you use the American College of Sports Medicine target heart rate method:

220 - Age = Maximum Heart Rate

The target range is established by multiplying the maximum heart rate times 85% for the upper range and 70% for the lower range. For an athlete who may have allowed their body to decondition because of off-season inactivity or injury, you may decide to use a 60% -80% target heart rate range.

Example: a 24 year old athlete's maximum heart rate would be 220 - 24 = 196 beats per minute (BPM). The target range would be (196 X .85)=167 and the lower range would be (196 X .70)=137.



Another method of establishing the predicted maximum heart rate is the Karvonen Method. The Karvonen Method takes into account the fitness level of the athlete. The fitness level is taken into consideration using the resting heart rate.

The Karvonen Method Formula is:

220 - Age = Age predicted maximum heart rate (APMHR)

APMHR – resting heart rate (RHR) = heart rate reserve (HRR)

(HRR X exercise intensity) + RHR = Target Heart rate (THR)

Percentage of Maximal heart Rate Method:

220 - Age = Age predicted maximum heart rate (APMHR)

(APMHR X exercise intensity) = (THR) Target Heart Rate

Example:

A 20 year old athlete is assigned an exercise intensity of 70-85% of MHR:

APMHR = 220 - 20 = 200 bpm

Lowers number of the athlete's THRR = $200 \times 0.07 = 140$ bpm Highest number of the athlete's THRR = $200 \times 0.85 = 170$ bpm

The Karvonen formula is not without its detractors. It has been pointed out that the predicted target heart rate, even when adjusted for age is subject to error, especially when dealing with cardiac patients. For those in good health, the Karvonen formula seems to be a compromise solution to selecting an intensity of exercise based on heart rate.

Remember, it is necessary to consider and compensate for any medications or drugs that the person is taking. Drugs may cause side effects on the cardiovascular, metabolic, and respiratory systems.

Sports/Rehab Model VersaClimber:

The Sports/Rehab VersaClimber (which can also be used for sport specific training) allows for, non-weight bearing, partial-weight bearing, and full-weight bearing, exercise, for athletes who are unable to compete or perform in their sport due to injury. Using the Sports/Rehab VersaClimber will allow the athlete to maintain or increase their total body conditioning, while a limb is isolated, they are still able to condition the rest of their body. Thus, when they return to their sport they are at a lower risk for injury and in high potential for athletic success.

The Sports/Rehab VersaClimber is a closed chain, non-impact, progressive range of motion and intensity device. One can benefit from it in the earliest stages of rehabilitation, through conditioning and to the very specific and demanding levels of Energy System Development.

Thus, The Sports/Rehab VersaClimber allows you to safely train the energy system that is needed in a specific sport, while a limb is isolated and without the pounding and potential damage to joints.

There are three Phases of closed chain exercises on the Sports/Rehab Model VersaClimber. They are all available for use during an athlete's rehabilitation. The trainer may decide to start the athlete at any phase or use multiple phases within the same session.

<u>Phase I</u> (non-weight bearing) - Phase I is for athlete's who need to eliminate one of more injured extremities from the exercise to be performed. The athlete exercises in a non-weight bearing seated position, while supporting the stationary injured limb with the isolator (or not using the limb in the case of an upper body extremity). The range of motion stops may be used to regulate the stroke length on one or both sides of the body.

<u>Phase II</u> (partial-weight bearing) - Phase II allows partial weight bearing exercise by using the seat. Exercise at this level involves all four or any combination of the extremities while body weight is supported by the seat. The reduced orthopedic loading allows for injured or weakened extremities to be safely exercised either actively or with continuous passive motion. Range of motion stops may also be used to regulate the stoke length. Partial weight bearing may also occur in the legs and/or lower back in the standing upright position by supporting the upper body with the arms when stepping.

<u>Phase III</u> (full weight bearing) - Phase III is for the athlete that can step or climb in a full weight bearing position. The seat may remain in place while stepping or climbing to allow for a gradual transition, alternating partial and full weight bearing in the same workout. Range of motion stops may be used to regulate the stoke length.

Please note: the sport specific interval training programs can be modified for use with any of the three Phases for use during rehabilitation by taking into consideration stroke lengths and type of weight bearing limb involvement specific to the injury.

Additional guidelines:

- 1. Obtain a thorough exercise and health history of the athlete prior to starting an exercise program.
- 2. If the athlete has any risk factors for Cardiac or Metabolic disorders, obtain clearance from their primary care physician to exercise the individual.
- 3. Consult the guidelines identified in "Guidelines For Exercise Testing and Prescription" published by the American College of Sports Medicine.
- 4. Make sure the athlete has been properly instructed on the VersaClimber. Even the most highly trained athletes can overwork on the machine. Most people should have at least four (4) introductory aerobic sessions on the VersaClimber prior to undertaking a serious consistent regimen.
- 5. Use heart rate to measure the intensity of the workout. Peak heart rate should not exceed 90% of the athlete's maximum heart rate.
- 6. There is no better way to learn all of the subtleties and applications of the VersaClimber than by you as a trainer or conditioning coach to personally train on it. Personal experience is the best way to learn how to implement the many capabilities of the VersaClimber with the various conditioning requirements of your athletes.
- 7. Start slow. Because the VersaClimber has no top end, it is easy for anyone to overwork. Use heart rate as a guide of exercise intensity. Perceived exertion is low because the workload is distributed over total body muscle mass. A positive first experience is important, so start first time users at 40 to 50 feet per minute until their level of conditioning can be determined. Step height should be 5 to 6 inches to start.

Current Exercises the VersaClimber can Replace

Current Exercise Bleachers/Stadium Hill Running	VersaClimber Power Climbing	 Advantage No pounding of joints. Can be sport specific. Active recovery. Upper and lower coordinated workout. Heart rate controlled.
Distance Running	Aerobic Climbing	 No pounding of joints. Upper and lower coordinated workout. Heart rate controlled.
Line Drills	Interval Sprint Climbing	 No pounding of joints. Improvement in heart rate recovery can be measured. Can be sport specific. Active recovery. Upper and lower coordinated workout. Heart rate controlled.
Rowing Machines	Aerobic Climbing	 Can be sport specific. Upper and lower coordinated workout. Does not place stress on lower back. VersaClimber has no upper limit.
Stationary Bikes	Aerobic Climbing	 Can be sport specific. Upper and lower coordinated workout. Does not place stress on lower back.

		• VersaClimber has no upper limit.
Stepping Machine	Aerobic Climbing	 No pounding of joints. Can be sport specific. Upper and lower coordinated workout. Does not place stress on lower back. VersaClimber has no upper limit.
Treadmill	Aerobic Climbing	 No pounding of joints. Can be sport specific. Upper and lower coordinated workout. VersaClimber has no upper limit.
Wind Sprints	Interval Sprint Climbing	 No pounding of joints. Improvement in heart rate recovery can be measured. Can be sport specific. Active recovery. Upper and lower coordinated workout. Heart rate controlled
Elliptical Machines	Aerobic Climbing	 Upper and lower coordinated workout. Variable step height. Can be a strength workout. Can easily switch between Total Body Exercise or lower body only.

Sport Specific Training Programs

We have created basic programs for different sports. We have laid out the information for your convenience to maximize the benefits for the athlete. First turn to a specific sport. Note: some sports are broken down by position.

These programs will first show the aerobic and anaerobic energy systems needed to compete in the sport and how the athlete will recover (recovery method) during the activity.

Then we describe a variety of Aerobic Climbing (to condition the athlete) and Interval Sprint Climbing (sport specific climbing) programs which you can integrate into your current conditioning procedures. You may find that the VersaClimber will eliminate the need for some of your other equipment (see 'Current Exercises The VersaClimber Can Replace' section). Please note: these programs have been designed using heart rate for both the control and measuring of aerobic intensity, peak heart rate after anaerobic intervals, and as a safety system. We suggest that you document the athletes heart rates for aerobic and anaerobic intervals, recovery times, climbing speeds, and total feet climbed in order to measure their progress.

Baseball

Activity De	script	ion:			
80% pure anaerobic			20%	anaerobic/aerob	vic
Recovery N	lethoo	ls:			
20%					
	mbing	g Program (30 minute pr	ogram):	
Time		Description			Target Heart Rate
0 -		Warm Up Climbing			warm up to 80%
10 -		Aerobic Climbing			maintain 80%
25 -	30	Cool Down Climbing			cool down to 60%
-	rint C	limbing Program 1 (30 n	ninute]	program):	
Time 0 -	10	Description			Target Heart Rate
	10	Warm Up Climbing			warm up to 80%
10 -	25	Interval Sprint Climbing	nda		
		Power Climbing for 10 seco		noto noducos to 9	00/
		Active Recovery climbing to Speed Climbing for 10 second		rate reduces to 8	0%
		1 0		rata raduaas ta 9	00/
		Active Recovery climbing to			0%
		Lower Limb Climbing for 1			00/
		Active Recovery climbing ti Repeat as many times as tim			070
		Record peak heart rates to m			
25 -	30	Cool Down Climbing	leasure	improvements	cool down to 60%
25 -	30	Cool Down Chinoling			cool down to 00%
	rint C	limbing Program 2 (30 n	ninute j	program):	
Time		Description			Target Heart Rate
0 -		Warm Up Climbing			warm up to 80%
10 -	25	Interval Sprint Climbing			
		Power Climbing for 10 seco			
		Active Recovery climbing for		conds	
		Speed Climbing for 10 second			
		Active Recovery climbing for			
		Lower Limb Climbing for 1			
		Active Recovery climbing for			
		repeat as many times as time			
25	20	Record peak heart rates to m	heasure	improvements	1.1
25 -	30	Cool Down Climbing			cool down to 60%
Off-Season	Train	ing Program			
Aero	bic Cli	mbing Program 2 - 3 days	a week	•	
Interv	val Spr	int Climbing Program 1 1	day a w	veek	
		ing Program			
Aero	bic Cli	mbing Program 2 days a v	week.		
		int Climbing Program 2 3		s a week	
	-	0 0	·		
		ng Aerobic Climbing Progra	m 20	days a week.	Interval Sprint
Climbing Pro	gram 2	2 1 day a week			

Basketball

Activity Descript	tion:			
• •	re anaerobic	15%	anaerobic/aerobi	ic
Recovery Metho				
80% act	tive recovery	20%	rest periods	
Aerobic Climbin	g Program (30 minute pr	ogram):	
Time	Description	~ 8		Target Heart Rate
0 - 10	Warm Up Climbing			warm up to 80%
10 - 25	Aerobic Climbing			maintain 80%
25 - 30	Cool Down Climbing			cool down to 60%
Intonvol Somint (Tlimbing Drogram 1 (20 x	minuto	nnognom).	
Time	Climbing Program 1 (30 I Description	mnute		Target Heart Rate
0 - 10	Warm Up Climbing			warm up to 80%
10 - 25	Interval Sprint Climbing			
10 20	Power Climbing for 10 seco	onds		
	Active Recovery climbing t		rate reduces to 80)%
	Speed Climbing for 10 seco			
	Active Recovery climbing t		rate reduces to 80)%
	Lower Limb Climbing for 1			
	Active Recovery climbing t)%
	Repeat as many times as tin			
	Record peak heart rates to r	neasure	improvements	
25 - 30 Cool Down Climbing				cool down to 60%
Interval Sprint (limbing Program 7 (60 r	ninuto	program).	
Time	Climbing Program 2 (60 n Description	mnute		Target Heart Rate
0 - 10	Warm Up Climbing			warm up to 80%
10 - 25	Interval Sprint Climbing			warm up to 0070
10 25	Power Climbing for 10 seco	onds		
	Active Recovery climbing f		econds	
	Speed Climbing for 10 seco			
	Active Recovery climbing f		econds	
	Lower Limb Climbing for 1			
	Active Recovery climbing f			
	repeat as many times as tim			
	Record peak heart rates to r			
25 - 35	Aerobic Climbing			maintain 75 - 80%
35 - 50	Interval Sprint Climbing			
50 - 60	Cool Down Climbing			cool down to 60%
Off-Season Train	ning Program			
	mbing Program 2 - 3 days a v	veek		
	int Climbing Program 1 1 day			
Pre-Season Train		•		
	mbing Program 2 days a wee	k.		
	int Climbing Program 2 3 - 4		veek	
In-Season Train	ing			
Aerobic Clin	mbing Program 2 days a wee			
Interval Spr	int Climbing Program 2 1 day	y a week	or Program 1 2 da	ays a week

	Bo	xing					
Activity Descript							
75% pur	e anaerobic	25%	anaerobic/aerob	pic			
Recovery Methods:							
70% acti	rest periods						
	g Program (50 minute pi	rooram	-				
Time	Description	logram	·)•	Target Heart Rate			
0 - 5	Warm Up Climbing			warm up to 80%			
5 - 45	Aerobic Climbing			maintain 80%			
45 - 50	Cool Down Climbing			cool down to 60%			
Interval Sprint C	Climbing Program 1 (45 i	minute	program):				
Time	Description			Target Heart Rate			
0 - 10	Warm Up Climbing			warm up to 80%			
10 - 25	Interval Sprint Climbing	. 1.					
	Power Climbing for 5 secon Active Recovery climbing to		rate reduces to 8	0%			
	Upper Limb Climbing for 5			0070			
	Active Recovery climbing to			0%			
	Speed Climbing for 5 secor						
	Active Recovery climbing	till heart	rate reduces to 8	0%			
	Lower Limb Climbing for 5						
	Active Recovery climbing			0%			
	Repeat as many times as tir						
25 - 30	Record peak heart rates to r Cool Down Climbing	neasure	improvements	cool down to 60%			
	-	• •	``	cool down to 0070			
Interval Sprint C	Climbing Program 2 (60 1 Description	minute	program):	Target Heart Rate			
0 - 10	Warm Up Climbing			warm up to 80%			
10 - 25	Interval Sprint Climbing						
	Power Climbing for 5 second	nds					
	Active Recovery climbing						
	Upper Limb Climbing for 5						
	Active Recovery climbing		econds				
	Speed Climbing for 5 secon Active Recovery climbing		aanda				
	Lower Limb Climbing for 5						
	Active Recovery climbing for						
	repeat as many times as tim						
	Record peak heart rates to r						
25 - 35	Aerobic Climbing		-	maintain 75 - 80%			
35 - 50	Interval Sprint Climbing						
50 - 60	Cool Down Climbing			cool down to 60%			
Off-Season Train	0 0						
	nbing Program 2 - 3 days a v						
-	nt Climbing Program 1 1 da	y a week					
2 Months Prior to	0 Event nbing Program 2 days a wee	k					
Interval Sprint Climbing Program 2 3 - 4 days a week							

Cycling (long distance)				
Activity Descrip	• -	U	,	
5% anaerobic/aerobic		95%	pure aerobic	
Recovery Metho				
90% ac	rest periods			
	-			
Aerobic Climbil Time	ng Program (60 minute j Description	program	1):	Target Heart Rate
0 - 10	Warm Up Climbing			warm up to 80%
10 - 50				maintain 80%
50 - 60	Cool Down Climbing			cool down to 60%
Interval Sprint	Climbing Program 1 (30	minute	nrogram).	
Time	Description	minute	program).	Target Heart Rate
0 - 10	Warm Up Climbing			warm up to 80%
10 - 25	Interval Sprint Climbing			-
	Power Climbing for 15 se	conds		
	Active Recovery climbing		rate reduces to a	80%
	Speed Climbing for 15 se			
	Active Recovery climbing			80%
	Lower Limb Climbing for			
	Active Recovery climbing			80%
	Repeat as many times as t			
25 20	Record peak heart rates to Cool Down Climbing	measure	improvements	cool down to 60%
25 - 30	cool down to 00%			
Interval Sprint	Climbing Program 2 (60	minute	program):	
Time	Description	minute	program):	Target Heart Rate
<i>Time</i> 0 - 10	Description Warm Up Climbing	minute	program):	<i>Target Heart Rate</i> warm up to 80%
Time	Description Warm Up Climbing Interval Sprint Climbing		program):	
<i>Time</i> 0 - 10	Description Warm Up Climbing Interval Sprint Climbing Power Climbing for 15 se	conds		
<i>Time</i> 0 - 10	Description Warm Up Climbing Interval Sprint Climbing Power Climbing for 15 se Active Recovery climbing	conds g for 45 so		
<i>Time</i> 0 - 10	Description Warm Up Climbing Interval Sprint Climbing Power Climbing for 15 se Active Recovery climbing Speed Climbing for 15 se	conds g for 45 se conds	econds	
<i>Time</i> 0 - 10	Description Warm Up Climbing Interval Sprint Climbing Power Climbing for 15 se Active Recovery climbing Speed Climbing for 15 se Active Recovery climbing	conds g for 45 se conds g for 45 se	econds	
<i>Time</i> 0 - 10	Description Warm Up Climbing Interval Sprint Climbing Power Climbing for 15 se Active Recovery climbing Speed Climbing for 15 se Active Recovery climbing Lower Limb Climbing for	conds g for 45 so conds g for 45 so 15 secor	econds econds ids	
<i>Time</i> 0 - 10	Description Warm Up Climbing Interval Sprint Climbing Power Climbing for 15 se Active Recovery climbing Speed Climbing for 15 se Active Recovery climbing Lower Limb Climbing for Active Recovery climbing	conds g for 45 se conds g for 45 se ; 15 secor g for 45 se	econds econds econds econds	
<i>Time</i> 0 - 10	Description Warm Up Climbing Interval Sprint Climbing Power Climbing for 15 se Active Recovery climbing Speed Climbing for 15 se Active Recovery climbing Lower Limb Climbing for Active Recovery climbing repeat as many times as ti	conds g for 45 so conds g for 45 so 15 secor g for 45 so me allow	econds econds ids econds s	
<i>Time</i> 0 - 10	Description Warm Up Climbing Interval Sprint Climbing Power Climbing for 15 se Active Recovery climbing Speed Climbing for 15 se Active Recovery climbing Lower Limb Climbing for Active Recovery climbing repeat as many times as ti Record peak heart rates to	conds g for 45 so conds g for 45 so 15 secor g for 45 so me allow	econds econds ids econds s	
<i>Time</i> 0 - 10 10 - 20	Description Warm Up Climbing Interval Sprint Climbing Power Climbing for 15 se Active Recovery climbing Speed Climbing for 15 se Active Recovery climbing Lower Limb Climbing for Active Recovery climbing repeat as many times as ti Record peak heart rates to Aerobic Climbing	conds g for 45 so conds g for 45 so 15 secor g for 45 so me allow	econds econds ids econds s	warm up to 80%
<i>Time</i> 0 - 10 10 - 20 20 - 45	Description Warm Up Climbing Interval Sprint Climbing Power Climbing for 15 se Active Recovery climbing Speed Climbing for 15 se Active Recovery climbing Lower Limb Climbing for Active Recovery climbing repeat as many times as ti Record peak heart rates to Aerobic Climbing	conds g for 45 so conds g for 45 so 15 secor g for 45 so me allow	econds econds ids econds s	warm up to 80%
$\begin{array}{r} Time \\ 0 & - & 10 \\ 10 & - & 20 \end{array}$ $\begin{array}{r} 20 & - & 45 \\ 45 & - & 55 \\ 55 & - & 60 \end{array}$	Description Warm Up Climbing Interval Sprint Climbing Power Climbing for 15 se Active Recovery climbing Speed Climbing for 15 se Active Recovery climbing Lower Limb Climbing for Active Recovery climbing repeat as many times as ti Record peak heart rates to Aerobic Climbing Interval Sprint Climbing Cool Down Climbing	conds g for 45 so conds g for 45 so 15 secor g for 45 so me allow	econds econds ids econds s	warm up to 80% maintain 75 - 80%
<i>Time</i> 0 - 10 10 - 20 20 - 45 45 - 55 55 - 60 Off-Season Trai	Description Warm Up Climbing Interval Sprint Climbing Power Climbing for 15 se Active Recovery climbing Speed Climbing for 15 se Active Recovery climbing Lower Limb Climbing for Active Recovery climbing repeat as many times as ti Record peak heart rates to Aerobic Climbing Interval Sprint Climbing Cool Down Climbing	conds g for 45 seconds g for 45 secon g for 45 secon g for 45 secon me allow measure	econds econds ads econds s improvements	warm up to 80% maintain 75 - 80%
<i>Time</i> 0 - 10 10 - 20 20 - 45 45 - 55 55 - 60 Off-Season Trai Aerobic C	Description Warm Up Climbing Interval Sprint Climbing Power Climbing for 15 se Active Recovery climbing Speed Climbing for 15 se Active Recovery climbing Lower Limb Climbing for Active Recovery climbing repeat as many times as ti Record peak heart rates to Aerobic Climbing Interval Sprint Climbing Cool Down Climbing	conds g for 45 seconds g for 45 secon g for 45 secon g for 45 secon me allow measure	econds econds ads econds s improvements k.	warm up to 80% maintain 75 - 80%
<i>Time</i> 0 - 10 10 - 20 20 - 45 45 - 55 55 - 60 Off-Season Trai Aerobic C	Description Warm Up Climbing Interval Sprint Climbing Power Climbing for 15 se Active Recovery climbing Speed Climbing for 15 se Active Recovery climbing Lower Limb Climbing for Active Recovery climbing repeat as many times as ti Record peak heart rates to Aerobic Climbing Interval Sprint Climbing Cool Down Climbing	conds g for 45 seconds g for 45 secon g for 45 secon g for 45 secon me allow measure	econds econds ads econds s improvements k.	warm up to 80% maintain 75 - 80%
<i>Time</i> 0 - 10 10 - 20 20 - 45 45 - 55 55 - 60 Off-Season Trai Aerobic C Interval Sp Pre-Season Trai	Description Warm Up Climbing Interval Sprint Climbing Power Climbing for 15 se Active Recovery climbing Speed Climbing for 15 se Active Recovery climbing Lower Limb Climbing for Active Recovery climbing repeat as many times as ti Record peak heart rates to Aerobic Climbing Interval Sprint Climbing Cool Down Climbing	conds g for 45 seconds for 45 seconds for 45 seconds g for 45 second g for 45 second me allow measure	econds econds ads econds s improvements k. week	warm up to 80% maintain 75 - 80%
<i>Time</i> 0 - 10 10 - 20 20 - 45 45 - 55 55 - 60 Off-Season Trai Aerobic C Interval Sp Pre-Season Trai Aerobic C Interval Sp	Description Warm Up Climbing Interval Sprint Climbing Power Climbing for 15 se Active Recovery climbing Speed Climbing for 15 se Active Recovery climbing Lower Limb Climbing for Active Recovery climbing repeat as many times as ti Record peak heart rates to Aerobic Climbing Interval Sprint Climbing Cool Down Climbing ming Program limbing Program 2 - 3 da print Climbing Program 1 ming Program limbing Program 3 - 4 da print Climbing Program 2	conds g for 45 seconds g for 45 secon g for 45 secon g for 45 secon g for 45 secon me allow measure	econds econds ads econds s improvements k. week k.	warm up to 80% maintain 75 - 80%
Time 0 - 10 10 - 20 10 - 20 20 - 45 45 - 55 55 - 60 Off-Season Trait Aerobic C Interval Sp Pre-Season Trait Aerobic C Interval Sp Interval Sp Interval Sp In-Season Trait Aerobic C	Description Warm Up Climbing Interval Sprint Climbing Power Climbing for 15 se Active Recovery climbing Speed Climbing for 15 se Active Recovery climbing Lower Limb Climbing for Active Recovery climbing repeat as many times as ti Record peak heart rates to Aerobic Climbing Interval Sprint Climbing Cool Down Climbing ming Program limbing Program 2 - 3 da print Climbing Program 1 ming Program limbing Program 3 - 4 da print Climbing Program 2 ing	conds g for 45 seconds (for 45 seconds) g for 45 seconds g for 45 seconds (for 45 seconds) (for 45 seconds)	econds econds ads econds s improvements k. week k.	warm up to 80% maintain 75 - 80%
$\begin{array}{r} Time \\ 0 & - & 10 \\ 10 & - & 20 \end{array}$ $\begin{array}{r} 20 & - & 45 \\ 45 & - & 55 \\ 55 & - & 60 \end{array}$ $\begin{array}{r} Off-Season \ Train \\ Aerobic \ C \\ Interval \ Sp \\ Pre-Season \ Train \\ Aerobic \ C \\ Interval \ Sp \\ In-Season \ Train \\ Aerobic \ C \end{array}$	Description Warm Up Climbing Interval Sprint Climbing Power Climbing for 15 se Active Recovery climbing Speed Climbing for 15 se Active Recovery climbing Lower Limb Climbing for Active Recovery climbing repeat as many times as ti Record peak heart rates to Aerobic Climbing Interval Sprint Climbing Cool Down Climbing ming Program limbing Program 2 - 3 da print Climbing Program 1 ming Program limbing Program 3 - 4 da print Climbing Program 2	conds g for 45 so conds g for 45 so to 15 secor g for 45 so me allow measure tys a weel 1 day a 2 days a a week.	econds econds ads econds s improvements k. week k. week	warm up to 80% maintain 75 - 80% cool down to 60%

Cycling (sprints)

Activity Des 30%	scription: anaerobic	20%	anaerobic/aerobic	50%	pure aerobic
		2070		5070	pure aerobie
Recovery M 90%	lethods: active rec	overy	10% rest periods		
Aerobic Cli	mbing Pro	gram (30 mi	inute program):		
10 -	 Warm Aerol 	escription 1 Up Climbin Dic Climbing Down Climbi	-		<i>Target Heart Rate</i> warm up to 80% maintain 80% cool down to 60%
Interval Spi	rint Climbi	ng Progran	n 1 (30 minute prog	ram):	
<i>Time</i> 0 - 10 -	D 10 Warn 25 Interv Powe Activ Speed Activ Lowe Activ Repea Recon	escription a Up Climbin, al Sprint Clir r Climbing for e Recovery cl l Climbing for e Recovery cl r Limb Climb e Recovery cl at as many times r d peak heart	g nbing r 20 seconds limbing till heart rate r r 20 seconds limbing till heart rate r bing for 20 seconds limbing till heart rate r nes as time allows rates to measure impro-	educes to a educes to a educes to a	30% 30%
25 -	30 Cool	Down Climbi	ng		cool down to 60%
<i>Time</i> 0 - 10 - 25 -	D 10 Warn 25 Interv Powe Activ Speed Activ Lowe Activ repea Recon 35 Aerol 50 Interv	escription a Up Climbin, a Sprint Clir r Climbing for e Recovery cl l Climbing for e Recovery cl r Limb Climb e Recovery cl t as many time r d peak heart bic Climbing al Sprint Clir	nbing r 30 seconds limbing for 30 seconds r 30 seconds limbing for 30 seconds bing for 30 seconds limbing for 30 seconds es as time allows rates to measure impro-		<i>Target Heart Rate</i> warm up to 80% Active maintain 75 - 80%
		Down Climbi			cool down to 60%
Interv Pre-Season Aerob Interv In-Season T Aerob	vic Climbing F al Sprint Clim Training P vic Climbing F al Sprint Clim Y raining vic Climbing F	Program 2 - bing Program Program Program 2 da bing Program Program 2 da	2 3 - 4 days a week	gram 1 2	days a week

Fencing

rencing					
Activity Descripti 90% an	on: aerobic	10%	anaerobic/aerobic		
Recovery Method 80% act	s: tive recovery	20%	rest periods		
Aerobic Climbing Time 0 - 10 - 25 - 30	<i>Target Heart Rate</i> warm up to 80% maintain 80% cool down to 60%				
Interval Sprint Cl <i>Time</i> 0 - 10 10 - 25	Upper Limb Clim Active Recovery of Speed Climbing for Active Recovery of Lower Limb Clim Active Recovery of Repeat as many ti	ng imbing for 5 seco climbing bing for 5 climbing or 5 seco climbing for climbing mes as tim	nds till heart rate reduces to 5 seconds till heart rate reduces to nds till heart rate reduces to 5 seconds till heart rate reduces to me allows	80% 80%	
25 - 30	Record peak heart Cool Down Climb		measure improvements	cool down to 60%	
Time 0 - 10 10 - 25 25 - 30	Cool Down Climb	ng imbing for 5 seco climbing bing for 5 climbing or 5 seco climbing for climbing nes as tin t rates to	nds for 15 seconds 5 seconds for 15 seconds nds for 15 seconds 5 seconds for 15 seconds	Target Heart Rate warm up to 80% cool down to 60%	
Interval Spr Pre-Season Train Aerobic Cli Interval Spr In-Season Trainin Aerobic Cli	mbing Program 2 - int Climbing Program ing Program mbing Program 2 o int Climbing Program	n 1 1 da days a wee n 2 3 - 4 days a wee	ny a week ek. 4 days a week ek.		

Field Hockey (field players)

Activity Description	0 n:			
60% ana	aerobic 20%	anaerobic/aer	obic 20%	pure aerobic
Recovery Method	S:			
-	ive recovery	20% rest p	eriods	
Aerobic Climbing	•	1		
Time	Description	ute program).		Target Heart Rate
0 - 10	Warm Up Climbi	ng		warm up to 80%
10 - 25	Aerobic Climbing	5		maintain 80%
25 - 30	Cool Down Clim	bing		cool down to 60%
Interval Sprint Cl	imbing Program 1	l (30 minute pro	ogram):	
Time	Description		-	Target Heart Rate
0 - 10	Warm Up Climbi	-		warm up to 80%
10 - 25	Interval Sprint Cl	-		
	Power Climbing			000/
	Active Recovery			80%
	Upper Limb Clim			000/
	Active Recovery		rt rate reduces to	80%
	Speed Climbing f		mt moto moducoso to	Q00/
	Active Recovery Lower Limb Clin			80%
	Active Recovery	U		800/
	Repeat as many ti	-		8070
	Record peak hear			
25 - 30	Cool Down Clim		e improvements	cool down to 60%
		0	·) ·	COOI down to 0070
Interval Sprint Cl	Description	2 (60 minute pro	ogram):	Target Heart Rate
0 - 10	Warm Up Climbi	ng		warm up to 80%
10 - 25	Interval Sprint Cl			······································
	Power Climbing	-		
	Active Recovery		seconds	
	Upper Limb Clim	-		
	Active Recovery	-		
	Speed Climbing f	for 10 seconds		
	Active Recovery	climbing for 30	seconds	
	Lower Limb Clin	bing for 10 seco	onds	
	Active Recovery	climbing for 30	seconds	
	repeat as many tin			
	Record peak hear		e improvements	
25 - 35	Aerobic Climbing			maintain 75 - 80%
35 - 50	Interval Sprint Cl	•		
50 - 60	Cool Down Clim	bing		cool down to 60%
Off-Season Traini				
	mbing Program 2		1	
Pre-Season Traini	int Climbing Program	n I I day a wee	K	
	mbing Program 2	dave a week		
	int Climbing Program		week	
In-Season Trainin		rauys u		
	mbing Program 2	days a week.		
	int Climbing Program		k or Program 1 2	days a week
		-	-	

Field Hockey (goalie)

Activity	Desci	ription	:			
	95%	ana	erobic	05%	anaerobic/aerobic	
Recovery	v Met	hods:				
-	50%		ve recovery	40%	rest periods	
Aerobic	Clin	nhina	Program (30 minu	to progr	am).	
	C ii me	nomg	Description	te progra	am).	Target Heart Rate
0	-	10	Warm Up Climbing			warm up to 80%
10	-	25	Aerobic Climbing			maintain 80%
25	-	30	Cool Down Climbing	g		cool down to 60%
Interval	Snr	int Cli	imbing Program 1 ((30 mini	ite program):	
	Time		Description	(F8).	Target Heart Rate
0	-	10	Warm Up Climbing			warm up to 80%
10	-	25	Interval Sprint Clim			
			Power Climbing for			
				-	l heart rate reduces to 80%	ò
			Upper Limb Climbin			
					l heart rate reduces to 80%	Ď
			Speed Climbing for			,
					l heart rate reduces to 80%	0
			Lower Limb Climbi			,
				-	l heart rate reduces to 80%	0
			Repeat as many time			
25		30	Cool Down Climbin		easure improvements	cool down to 60%
				-		COOI dOWII to 00%
	Spr Time		mbing Program 2 (Description	(60 minı	ite program):	Target Heart Rate
0	-	10	Warm Up Climbing			warm up to 80%
10	-	25	Interval Sprint Clim			
			Power Climbing for			
			Active Recovery cli	-		
			Upper Limb Climbin			
			Active Recovery cli			
			Speed Climbing for			
			Active Recovery cli			
			Lower Limb Climbi			
			Active Recovery cli	-		
			repeat as many time			
25	-	35	Aerobic Climbing	ates to me	easure improvements	maintain 75 - 80%
	-	50	Interval Sprint Clim	bing		maintain 75 - 8070
	_	60	Cool Down Climbin			cool down to 60%
				5		coor down to 0070
			g Program	2 1	1	
			nbing Program 2 - 3			
			nt Climbing Program g Program	1 1 day	y a week	
			nbing Program 2 da	avs a weel	z	
			nt Climbing Program			
In-Seaso			chinoing i rogiulli	+	augs a noon	
			nbing Program 2 da	ays a weel	k.	
					y a week or Program 1 2	days a week
		-		•	-	

Activity Description: 90% anaerobic 10% anaerobic/aerobic Recovery Methods: 40% active recovery 60% rest periods Aerobic Climbing Program (30 minute program): Time Description Target Heart Rate 0 - 10 Warm Up Climbing warm up to 80% 10 - 25 Aerobic Climbing maintain 80% 25 - 30 Cool Down Climbing cool down to 60% Interval Sprint Climbing Program 1 (30 minute program): Time Description Target Heart Rate 0 - 10 Warm Up Climbing warm up to 80% 10 - 25 Interval Sprint Climbing Program 1 (30 minute program): Time Description Target Heart Rate 0 - 10 Warm Up Climbing warm up to 80% 10 - 25 Interval Sprint Climbing Power Climbing for 10 seconds Active Recovery climbing till heart rate reduces to 80% Speed Climbing for 10 seconds Active Recovery climbing till heart rate reduces to 80% Lower Limb Climbing for 10 seconds Active Recovery climbing till heart rate reduces to 80%
Recovery Wethods:40%active recovery60% rest periodsAerobic cliwbing program (30 minute program): $Time$ $Description$ $Target Heart Rate$ 0-10Warm Up Climbingwarm up to 80%10-25Aerobic Climbingmaintain 80%25-30Cool Down Climbingcool down to 60%Interval Sprint Climbing Program 1 (30 minute program): $Time$ $Description$ $Target Heart Rate$ 0-10Warm Up Climbingwarm up to 80%Interval Sprint Climbing Program 1 (30 minute program):Target Heart Rate0-10Warm Up Climbing10-25Interval Sprint Climbingwarm up to 80%10-25Interval Sprint ClimbingPower Climbing for 10 secondsActive Recovery climbing till heart rate reduces to 80%Speed Climbing for 10 secondsActive Recovery climbing till heart rate reduces to 80%Lower Limb Climbing for 10 secondsActive Recovery climbing till heart rate reduces to 80%
40%active recovery $60%$ rest periodsAerobic Climbing Program (30 minute program): $Time$ $Description$ $Target Heart Rate$ 0-10Warm Up Climbingwarm up to 80%10-25Aerobic Climbingmaintain 80%25-30Cool Down Climbingcool down to 60%Interval Sprint Climbing Program 1 (30 minute program): $Time$ $Description$ $Target Heart Rate$ 0-10Warm Up Climbingwarm up to 80%10-25Interval Sprint Climbing for 10 secondsActive Recovery climbing till heart rate reduces to 80%10-25Interval Sprint Climbing for 10 secondsActive Recovery climbing till heart rate reduces to 80%10-25Interval Sprint Climbing for 10 secondsActive Recovery climbing for 10 seconds
Aerobic Climbing Program (30 minute program):TimeDescriptionTarget Heart Rate0-10Warm Up Climbingwarm up to 80%10-25Aerobic Climbingmaintain 80%25-30Cool Down Climbingcool down to 60%Interval Sprint Climbing Program 1 (30 minute program):TimeDescriptionTarget Heart Rate0-10Warm Up Climbingwarm up to 80%10-25Interval Sprint Climbingwarm up to 80%10-25Interval Sprint ClimbingPower ClimbingPower Climbing for 10 secondsActive Recovery climbing till heart rate reduces to 80%Speed Climbing for 10 secondsActive Recovery climbing for 10 secondsActive Recovery climbing till heart rate reduces to 80%Lower Limb Climbing for 10 seconds
TimeDescriptionTarget Heart Rate0-10Warm Up Climbingwarm up to 80%10-25Aerobic Climbingmaintain 80%25-30Cool Down Climbingcool down to 60%Interval Sprint Climbing Program 1 (30 minute program):TimeDescriptionTarget Heart Rate0-10Warm Up Climbingwarm up to 80%10-25Interval Sprint Climbingwarm up to 80%10-25Interval Sprint ClimbingPower Climbing for 10 secondsActive Recovery climbing for 10 secondsActive Recovery climbing till heart rate reduces to 80%Speed Climbing for 10 secondsActive Recovery climbing for 10 secondsActive Recovery climbing till heart rate reduces to 80%Lower Limb Climbing for 10 seconds
0-10Warm Up Climbingwarm up to 80%10-25Aerobic Climbingmaintain 80%25-30Cool Down Climbingcool down to 60%Interval Sprint Climbing Program 1 (30 minute program):TimeDescriptionTarget Heart Rate0-10Warm Up Climbingwarm up to 80%10-25Interval Sprint Climbingpower Official down up to 80%10-25Interval Sprint Climbingpower Climbing for 10 secondsActive Recovery climbing for 10 secondsActive Recovery climbing till heart rate reduces to 80%Speed Climbing for 10 secondsActive Recovery climbing for 10 secondsActive Recovery climbing till heart rate reduces to 80%Lower Limb Climbing for 10 seconds
10 - 25Aerobic Climbingmaintain 80%25 - 30Cool Down Climbingcool down to 60%Interval Sprint Climbing Program 1 (30 minute program):TimeDescriptionTarget Heart Rate0 - 10Warm Up Climbingwarm up to 80%10 - 25Interval Sprint Climbing Power Climbing for 10 seconds Active Recovery climbing till heart rate reduces to 80% Speed Climbing for 10 seconds Active Recovery climbing till heart rate reduces to 80% Lower Limb Climbing for 10 seconds
25 - 30Cool Down Climbingcool down to 60%Interval Sprint Climbing Program 1 (30 minute program):TimeDescriptionTarget Heart Rate0 - 10Warm Up Climbingwarm up to 80%10 - 25Interval Sprint Climbing Power Climbing for 10 seconds Active Recovery climbing till heart rate reduces to 80% Speed Climbing for 10 seconds Active Recovery climbing till heart rate reduces to 80% Lower Limb Climbing for 10 seconds
Interval Sprint Climbing Program 1 (30 minute program): Time Description Target Heart Rate 0 - 10 Warm Up Climbing warm up to 80% 10 - 25 Interval Sprint Climbing power Climbing for 10 seconds Active Recovery climbing for 10 seconds Active Recovery climbing till heart rate reduces to 80% Speed Climbing for 10 seconds Active Recovery climbing till heart rate reduces to 80% Lower Limb Climbing for 10 seconds
TimeDescriptionTarget Heart Rate0 - 10Warm Up Climbingwarm up to 80%10 - 25Interval Sprint ClimbingPower Climbing for 10 secondsActive Recovery climbing till heart rate reduces to 80%Speed Climbing for 10 secondsActive Recovery climbing till heart rate reduces to 80%Lower Limb Climbing for 10 seconds
0 - 10Warm Up Climbingwarm up to 80%10 - 25Interval Sprint Climbing Power Climbing for 10 seconds Active Recovery climbing till heart rate reduces to 80% Speed Climbing for 10 seconds Active Recovery climbing till heart rate reduces to 80% Lower Limb Climbing for 10 seconds
Power Climbing for 10 seconds Active Recovery climbing till heart rate reduces to 80% Speed Climbing for 10 seconds Active Recovery climbing till heart rate reduces to 80% Lower Limb Climbing for 10 seconds
Active Recovery climbing till heart rate reduces to 80% Speed Climbing for 10 seconds Active Recovery climbing till heart rate reduces to 80% Lower Limb Climbing for 10 seconds
Speed Climbing for 10 seconds Active Recovery climbing till heart rate reduces to 80% Lower Limb Climbing for 10 seconds
Active Recovery climbing till heart rate reduces to 80% Lower Limb Climbing for 10 seconds
Lower Limb Climbing for 10 seconds
Active Recovery climbing till heart rate reduces to 80%
Repeat as many times as time allows
Record peak heart rates to measure improvements25 - 30Cool Down Climbingcool down to 60%
-
Interval Sprint Climbing Program 2 (60 minute program): Time Description Target Heart Rate
0 - 10 Warm Up Climbing warm up to 80%
10 - 25 Interval Sprint Climbing
Power Climbing for 10 seconds
Active Recovery climbing for 30 seconds Upper Limb Climbing for 10 seconds
Active Recovery climbing for 30 seconds
Speed Climbing for 10 seconds
Active Recovery climbing for 30 seconds
Lower Limb Climbing for 10 seconds
Active Recovery climbing for 30 seconds repeat as many times as time allows
Record peak heart rates to measure improvements
25 - 35 Aerobic Climbing maintain 75 - 80%
35 - 50 Interval Sprint Climbing
50 - 60Cool Down Climbingcool down to 60%
Off-Season Training Program
Aerobic Climbing Program 2 - 3 days a week. Interval Sprint Climbing Program 1 1 day a week
Pre-Season Training Program
Aerobic Climbing Program 2 days a week.
Interval Sprint Climbing Program 2 3 - 4 days a week
In-Season Training Aerobic Climbing Program 2 days a week.
Interval Sprint Climbing Program 2 1 day a week or Program 1 2 days a week

Golf

		JUII		
Activity Descrip	-			
95% ai	naerobic	5%	anaerobic/aero	bic
Recovery Meth	ods:			
50% ac	ctive recovery	50%	rest periods	
			、 、	
	ng Program (30 minute p	orogran	ı):	
Time	Description			Target Heart Rate
0 - 10	Warm Up Climbing			warm up to 80%
10 - 25	e			maintain 80%
25 - 30	Cool Down Climbing			cool down to 60%
		•	,	
-	Climbing Program 1 (30	minute	program):	
Time	Description			Target Heart Rate
0 - 10	Warm Up Climbing			warm up to 80%
10 - 25	Interval Sprint Climbing			
	Power Climbing for 5 seco			
	Active Recovery climbing	till hear	t rate reduces to	80%
	Speed Climbing for 5 seco	onds		
	Active Recovery climbing	till hear	t rate reduces to	80%
	Lower Limb Climbing for	5 second	ls	
	Active Recovery climbing	till hear	t rate reduces to	80%
	Repeat as many times as ti			
	Record peak heart rates to			
25 - 30	Cool Down Climbing	measure	mprovements	cool down to 60%
25 50	eddi Down ennionig			0001 00 00 10 00 10
Interval Sprint	Climbing Program 2 (30	minute	program):	
Time	Description			Target Heart Rate
0 - 10	Warm Up Climbing			warm up to 80%
10 - 25	Interval Sprint Climbing			1
	Power Climbing for 5 seco	onds		
	Active Recovery climbing		econds	
	Speed Climbing for 5 seco			
	Active Recovery climbing		econds	
	Lower Limb Climbing for			
	Active Recovery climbing			
	repeat as many times as tir			
25 20	Record peak heart rates to	measure	improvements	
25 - 30	Cool Down Climbing			cool down to 60%
Off-Season Tra	ining Program			
	Climbing Program 2 - 3 day		1-	
		-		
interval S	print Climbing Program 1	i uay a	WEEK	
Pre-Season Tra	ining Program			
	Climbing Program 3 -4 day	ic a waal	-	
	print Climbing Program 2	∠ uays a	WEEK	
In-Season Train				
Aerobic Climbing Program 3 days a week.				

Interval Sprint Climbing Program 2 -- 1 day a week

Gymnastics Activity Description: 90% anaerobic 10% anaerobic/aerobic **Recovery Methods:** 10% active recovery 90% rest periods Aerobic Climbing Program (30 minute program): Time Description Target Heart Rate 0 - 10 Warm Up Climbing warm up to 80% 10 -25 Aerobic Climbing maintain 80% 25 - 30 Cool Down Climbing cool down to 60% **Interval Sprint Climbing Program 1 (30 minute program):** Time Description Target Heart Rate 0 - 10 Warm Up Climbing warm up to 80% 10 - 25 Interval Sprint Climbing Power Climbing for 10 seconds Active Recovery climbing till heart rate reduces to 80% Speed Climbing for 10 seconds Active Recovery climbing till heart rate reduces to 80% Lower Limb Climbing for 10 seconds Active Recovery climbing till heart rate reduces to 80% Repeat as many times as time allows Record peak heart rates to measure improvements 25 - 30 Cool Down Climbing cool down to 60% **Interval Sprint Climbing Program 2 (30 minute program):** Time Description Target Heart Rate 0 - 10 Warm Up Climbing warm up to 80% 10 - 25 Interval Sprint Climbing Power Climbing for 10 seconds Active Recovery climbing for 30 seconds Speed Climbing for 10 seconds Active Recovery climbing for 30 seconds Lower Limb Climbing for 10 seconds Active Recovery climbing for 30 seconds repeat as many times as time allows Record peak heart rates to measure improvements 25 - 30 Cool Down Climbing cool down to 60% **Off-Season Training Program** Aerobic Climbing Program -- 2 - 3 days a week.

Aerobic Climbing Program -- 2 - 3 days a week. Interval Sprint Climbing Program 1 -- 1 day a week

Pre-Season Training Program

Aerobic Climbing Program -- 2 days a week. Interval Sprint Climbing Program 2 -- 3 - 4 days a week

In-Season Training

Aerobic Climbing Program -- 2 days a week. Interval Sprint Climbing Program 2 -- 1 day a week

Ice Hockey	fo	rward	ls/	def	fense)
------------	----	-------	-----	-----	--------

Activity Descrip 60% an		20%	anaerobic/aerobic	20%	pure aerobic			
		2070	anderobie/ derobie	2070	pure aerobie			
Recovery Metho 95% ac	rest periods							
Aerobic Climbir	Aerobic Climbing Program (30 minute program):							
$\begin{array}{r} Time \\ 0 & - & 10 \\ 10 & - & 25 \\ 25 & - & 30 \end{array}$	Description Warm Up Climbir Aerobic Climbing Cool Down Climb	-		warm mainta	<i>Heart Rate</i> up to 80% iin 80% own to 60%			
-		n 1 (30	minute program):					
<i>Time</i> 0 - 10 10 - 25		mbing or 10 sec climbing	till heart rate reduces to	warm	<i>Heart Rate</i> up to 80%			
25 - 30	Speed Climbing for 10 secondsActive Recovery climbing till heart rate reduces to 80%Lower Limb Climbing for 10 secondsActive Recovery climbing till heart rate reduces to 80%Repeat as many times as time allowsRecord peak heart rates to measure improvements30Cool Down Climbingcool down to 60							
	limbing Program 2	U	uto program).	c oor u	5 WH to 5070			
Time	Description		ute program).	Target	Heart Rate			
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	Warm Up Climbir Interval Sprint Cli Power Climbing for Active Recovery of Upper Limb Climbing for Active Recovery of Speed Climbing for Active Recovery of Lower Limb Climbing Active Recovery of repeat as many tim	mbing or 10 sec climbing bing for climbing or 10 sec climbing bing for climbing nes as tin rates to mbing	for 30 seconds 10 seconds for 30 seconds onds for 30 seconds 10 seconds for 30 seconds	warm	up to 80% iin 75 - 80% own to 60%			
Off-Season Trainin	g Program	-						
Off-Season Training Program Aerobic Climbing Program 2 - 3 days a week. Interval Sprint Climbing Program 1 1 day a week Pre-Season Training Program Aerobic Climbing Program 2 days a week. Interval Sprint Climbing Program 2 3 - 4 days a week In-Season Training Aerobic Climbing Program 2 days a week. Interval Sprint Climbing Program 2 1 day a week or Program 1 2 days a week								

Ice Hockey (goalie)					
Activity Description)n:				
95% an	aerobic	5%	anaerobic/aero	bic	
Recovery Methods					
•	tive recovery	80%	rest periods		
	-		rest periods		
	Program (30 minute progr	:am):			
Time	Description			Target Heart Rate	
0 - 10	Warm Up Climbing			warm up to 80%	
10 - 25	Aerobic Climbing			maintain 80%	
25 - 30	Cool Down Climbing			cool down to 60%	
Interval Sprint Cli	imbing Program 1 (30 minu	ute progra	am):		
Time	Description			Target Heart Rate	
0 - 10	Warm Up Climbing			warm up to 80%	
10 - 25	Interval Sprint Climbing				
	Power Climbing for 5 seco				
	Active Recovery climbing		ate reduces to 80)%	
	Upper Limb Climbing for				
	Active Recovery climbing		ate reduces to 80)%	
	Speed Climbing for 5 seco				
	Active Recovery climbing)%	
	Lower Limb Climbing for				
	Active Recovery climbing)%	
	Repeat as many times as ti				
	Record peak heart rates to	measure in	mprovements		
25 - 30	Cool Down Climbing		<u>`</u>	cool down to 60%	
-	imbing Program 2 (60 minu	ute progra	am):	Tana at Us ant Data	
<i>Time</i> 0 - 10	Description Warm Up Climbing			<i>Target Heart Rate</i> warm up to 80%	
10 - 25	Interval Sprint Climbing			warm up to 0070	
10 25	Power Climbing for 5 seco	onds			
	Active Recovery climbing		conds		
	Upper Limb Climbing for		01105		
	Active Recovery climbing		conds		
	Speed Climbing for 5 seco				
	Active Recovery climbing		conds		
	Lower Limb Climbing for				
	Active Recovery climbing				
	repeat as many times as tir				
	Record peak heart rates to		mprovements		
25 - 35	Aerobic Climbing		-	maintain 75 - 80%	
35 - 50	Interval Sprint Climbing				
50 - 60	Cool Down Climbing			cool down to 60%	
Off-Season Trainin	g Program				
	imbing Program 2 - 3 days	a week.			
	rint Climbing Program 1 1		2		
Pre-Season Trainin	5 5	-			
Aerobic Cli	imbing Program 2 days a w	veek.			
	rint Climbing Program 2 3		week		
In-Season Training					
	imbing Program 2 days a w				
Interval Spi	rint Climbing Program 2 1	day a week	or Program 1 2	2 days a week	

	Ice	Skati	ng		
Activity Descript		2004	1. / 1		
80% ana	erobic	20%	anaerobic/aerob	01C	
Recovery Method	ls:				
90% acti	ve recovery	10%	rest periods		
Aerobic Climbing	g Program (30 minute pr	ogram)	:		
Time	Description	-		Target Heart Rate	
0 - 10	Warm Up Climbing			warm up to 80%	
10 - 25	Aerobic Climbing			maintain 80%	
25 - 30	Cool Down Climbing			cool down to 60%	
Interval Sprint C	limbing Program 1 (30 n	ninute p	orogram):		
Time	Description			Target Heart Rate	
0 - 10	Warm Up Climbing			warm up to 80%	
10 - 25	Interval Sprint Climbing				
	Power Climbing for 10 seco			00/	
	Active Recovery climbing t Speed Climbing for 10 seco		rate reduces to 8	0%	
	Active Recovery climbing to		rate reduces to 8	0%	
	Lower Limb Climbing for 1			070	
	Active Recovery climbing t			0%	
	Repeat as many times as tin				
	Record peak heart rates to n				
25 - 30	Cool Down Climbing			cool down to 60%	
Interval Sprint C	limbing Program 2 (30 n	ninute r	program):		
Time	Description			Target Heart Rate	
0 - 10	Warm Up Climbing			warm up to 80%	
11 - 25	Interval Sprint Climbing				
	Power Climbing for 10 second				
	Active Recovery climbing f		conds		
	Speed Climbing for 10 seco				
	Active Recovery climbing f				
	Lower Limb Climbing for 1				
	Active Recovery climbing f repeat as many times as time		conds		
	Record peak heart rates to n		mprovements		
25 - 30	Cool Down Climbing	licasure i	mprovements	cool down to 60%	
	_				
Off-Season Train					
	mbing Program 2 - 3 days				
Interval Spr	rint Climbing Program 1 1	l day a w	еек		
Pre-Season Train	ing Program				
Aerobic Cli	mbing Program 2 days a				
Interval Sprint Climbing Program 2 3 - 4 days a week					

In-Season Training

Aerobic Climbing Program -- 2 days a week. Interval Sprint Climbing Program 2 -- 1 day a week

Jet Ski Racing

		NI NAUII	g		
Activity Descrip					
80% a	anaerobic 20%	anaerobic	aerobic		
Recovery Metho	ods:				
•	active recovery	10% re	st periods		
	ng Program (30 minute pro		st periods		
Time	Description	gram).	,	Target Heart Rate	
0 - 10	Warm Up Climbing				
				warm up to 80% maintain 80%	
10 - 25	e				
25 - 30	υ			cool down to 60%	
-	Climbing Program 1 (30 mi	nute program			
Time	Description			Target Heart Rate	
0 - 10			,	warm up to 80%	
10 - 25	1 0				
	Power Climbing for 10 sec				
	Active Recovery climbing		educes to 80%		
	Upper Limb Climbing for		1 0004		
	Active Recovery climbing		reduces to 80%		
	Speed Climbing for 10 sec				
	Active Recovery climbing		educes to 80%		
	Lower Limb Climbing for				
	Active Recovery climbing		educes to 80%		
	Repeat as many times as ti				
	Record peak heart rates to	measure impre	ovements		
25 - 30	e			cool down to 60%	
Interval Sprint	Climbing Program 2 (60 mi	nute program	n):		
Time	Description		,	Target Heart Rate	
0 - 10	1 0		•	warm up to 80%	
10 - 20	1 0				
	Power Climbing for 20 sec				
	Active Recovery climbing	for 45 second	8		
	Upper Limb Climbing for	20 seconds			
	Active Recovery climbing	for 45 second	8		
	Speed Climbing for 20 sec	onds			
	Active Recovery climbing	for 45 second	8		
	Lower Limb Climbing for	20 seconds			
	Active Recovery climbing	for 45 second	5		
	repeat as many times as tir	ne allows			
	Record peak heart rates to	measure impre	ovements		
20 - 35	Aerobic Climbing	-	1	maintain 75-80%	
35 - 50					
50 - 60			(cool down to 60%	
Off-Season Trai					
	Climbing Program 2 - 3 days	a week.			
	print Climbing Program 1 1				
Pre-Season Trai		-			
	Climbing Program 2 days a w	eek.			
Interval Sprint Climbing Program 2 3 - 4 days a week					
In-Season Train		-			
	Climbing Program 2 days a w	eek.			
	print Climbing Program 2 1				
		-			
		27			

Activity Description:	-	-
95% anaerobic	5%	anaerobic/aerobic
Recovery Methods:		
80% active recovery	20%	rest periods
Aerobic Climbing Program (30 minute prog	ram):	
Time Description		Target Heart Rate
0 - 10 Warm Up Climbing		warm up to 80%
10-25Aerobic Climbing25-30Cool Down Climbing		maintain 80% cool down to 60%
C C		
Interval Sprint Climbing Program 1 (30 min	ute prog	-
<i>Time Description</i> 0 - 10 Warm Up Climbing		<i>Target Heart Rate</i> warm up to 80%
10 - 25 Interval Sprint Climbing		warm up to 80%
Power Climbing for 10 sec	onds	
Active Recovery climbing		t rate reduces to 80%
Upper Limb Climbing for		
Active Recovery climbing		t rate reduces to 80%
Speed Climbing for 10 sec		
Active Recovery climbing Lower Limb Climbing for		
Active Recovery climbing		
Repeat as many times as times		
Record peak heart rates to		
25 - 30 Cool Down Climbing		cool down to 60%
Interval Sprint Climbing Program 2 (30 min	ute pros	gram):
Time Description	1	Target Heart Rate
0 - 10 Warm Up Climbing		warm up to 80%
10 - 25 Interval Sprint Climbing	1	
Power Climbing for 10 sec Active Recovery climbing		aconda
Upper Limb Climbing for		
Active Recovery climbing		
Speed Climbing for 10 sec		
Active Recovery climbing		econds
Lower Limb Climbing for		
Active Recovery climbing		
repeat as many times as tin		
Record peak heart rates to 25 - 30 Cool Down Climbing	measure	cool down to 60%
Off-Season Training Program Aerobic Climbing Program 2 - 3 days a	wook	
Interval Sprint Climbing Program 1 1 da		ς.
Pre-Season Training Program		
Aerobic Climbing Program 2 days a wee		
Interval Sprint Climbing Program 2 3 - 4	l days a v	week
In-Season Training Aerobic Climbing Program 2 days a wee	sk	
Interval Sprint Climbing Program 2 1 da		ζ.
	•	

Motor Sports (drag)

28

	_		Motor Spor	19 (L)	nuur ance)	
Activity						
	5%		erobic/aerobic	95%	pure aerobic	
Recover	y Me	thods:				
(90%	acti	ve recovery	10%	rest periods	
Aerobic	Clim	ibing P	rogram (30 minute program):		
	Time		Description			Target Heart Rate
0	-	10	Warm Up Climbing			warm up to 80%
10	-	25	Aerobic Climbing			maintain 80%
	-	30	Cool Down Climbing			cool down to 60%
Intorvol	Snui	nt Clin	0	nnognos	m).	
	Spri Time	nt Chi	nbing Program 1 (30 minute Description	program	(II):	Target Heart Rate
0		10	Warm Up Climbing			warm up to 80%
10		25	Interval Sprint Climbing			warm up to 80%
10	-	23	Power Climbing for 10 secon	de		
			Active Recovery climbing till		te reduces to 80%	
			Upper Limb Climbing for 10		at reduces to 80%)
			Active Recovery climbing till		te reduces to 80%	
			Speed Climbing for 10 second		at reduces to 80%)
			Active Recovery climbing till		te reduces to 80%	
			Lower Limb Climbing for 10)
			Active Recovery climbing till			
			Repeat as many times as time		at reduces to 80%)
			Record peak heart rates to me		nrovements	
25	-	30	Cool Down Climbing	asure m	iprovenients	cool down to 60%
-			mbing Program 2 (60 minu	to nrog	ram).	cool down to 0070
	Time	mi Ch	Description	ic prog	1 am).	Target Heart Rate
0	-	10	Warm Up Climbing			warm up to 80%
	-	25	Interval Sprint Climbing			wann ap to 0070
10		23	Power Climbing for 10 secon	de		
			Active Recovery climbing for		ands	
			Upper Limb Climbing for 10		ind 5	
			Active Recovery climbing for		ands	
			Speed Climbing for 10 second		ind 5	
			Active Recovery climbing for		ands	
			Lower Limb Climbing for 10			
			Active Recovery climbing for			
			repeat as many times as time		ilus	
			Record peak heart rates to me		provements	
25	-	35	Aerobic Climbing	usure m	iprovenients	maintain 75 - 80%
	-		Interval Sprint Climbing			intaintain 75 0070
50		60	Cool Down Climbing			cool down to 60%
			Program			
			bing Program 2 - 3 days a w	eek.		
			nt Climbing Program 1 1 day			
			Program			
	Aerol	oic Clin	bing Program 2 days a week			
]	[nterv	al Sprin	nt Climbing Program 2 3 - 4	days a w	eek	
In-Seaso						
			bing Program 2 days a week			
]	Interv	al Sprin	nt Climbing Program 2 1 day	a week	or Program 1 2 o	days a week

Motor Sports (Endurance)

Power Walking

Activity Descrip	otion:		8		
	naerobic/aerobic	95%	pure aerobic		
Recovery Metho	ods:				
•	ctive recovery	5%	rest periods		
Aerobic Climbi	ng Program (30 minute	progran	ı):		
Time	Description			Target Heart Rate	
0 - 10	Warm Up Climbing			warm up to 80%	
10 - 25	Aerobic Climbing			maintain 80%	
25 - 30	Cool Down Climbing			cool down to 60%	
	Climbing Program 1 (30) minute	program):		
Time	Description			Target Heart Rate	
0 - 10	Warm Up Climbing			warm up to 80%	
10 - 25	Interval Sprint Climbing				
	Power Climbing for 10 se			000/	
	Active Recovery climbing		t rate reduces to	80%	
	Speed Climbing for 10 se			000/	
	Active Recovery climbing	-		80%	
	Lower Limb Climbing for			000/	
	Active Recovery climbing	-		80%	
	Repeat as many times as t				
25 20	Record peak heart rates to	o measure	improvements		
25 - 30	Cool Down Climbing			cool down to 60%	
Interval Sprint	Climbing Program 2 (30) minute	program):		
Time	Description			Target Heart Rate	
0 - 10	Warm Up Climbing			warm up to 80%	
10 - 25	Interval Sprint Climbing				
	Power Climbing for 10 se				
	Active Recovery climbing	-	econds		
	Speed Climbing for 10 se				
	Active Recovery climbing	-			
	Lower Limb Climbing for				
	Active Recovery climbing				
	repeat as many times as ti				
	Record peak heart rates to	o measure	improvements		
25 - 30	Cool Down Climbing			cool down to 60%	
Off-Season Trai	ining Program				
	Climbing Program 2 - 3 da	ays a wee	k.		
	print Climbing Program 1	•			
Pre-Season Tra		J			
	Climbing Program 2 days	a week.			
	print Climbing Program 2		vs a week		
In-Season Train			, .		
	Climbing Program 2 days	a week			
			week		
Interval Sprint Climbing Program 2 1 day a week					

Rowing							
Activity Description:	200/	1. /		500/ 1:			
20% anaerobi	c 30%	anaerobic/aero	b1C	50% pure aerobic			
Recovery Methods:							
80% active re-	covery	20%	rest peri	ods			
Aerobic Climbing Pro	0	nute program	ı) :				
	Description			Target Heart R			
	m Up Climbing obic Climbing	r		warm up to 80 maintain 80%			
	l Down Climbin	nσ		cool down to			
		0			0070		
Interval Sprint Climb		ato					
	<i>Description</i> m Up Climbing	Ţ		<i>Target Heart R</i> warm up to 80			
	val Sprint Clin			warm up to ot	,,0		
	er Climbing for	-					
		imbing till heart	rate redu	ces to 80%			
	ed Climbing for						
	-	imbing till heart		ces to 80%			
		ing for 10 secon					
	-	imbing till heart		ces to 80%			
		es as time allow					
	l Down Climbi	rates to measure	improven	cool down to	600/		
		e		cool down to	0070		
Interval Sprint Climbin Time		60 minute prog	gram):	Tanget Heant P	ata		
	<i>Description</i> m Up Climbing	T		<i>Target Heart R</i> warm up to 80			
	val Sprint Clin			wann ap to ot)/0		
	er Climbing for						
		imbing for 30 se	econds				
		ing for 10 secon					
Activ	ve Recovery cli	imbing for 30 se	econds				
	ed Climbing for						
		imbing for 30 se					
		ing for 10 secon					
	Active Recovery climbing for 30 seconds repeat as many times as time allows						
		ates to measure		ante			
	bic Climbing	ales to measure	mproven	maintain 75 -	80%		
	val Sprint Clim	nhing		mamam 75 -	0070		
	Down Climbi	•		cool down to	60%		
Off-Season Training Prog		8					
Aerobic Climbing		3 days a week.					
Interval Sprint Clin	mbing Program 1	I 1 day a week					
Pre-Season Training Prog							
Aerobic Climbing			wool				
Interval Sprint Climbing Program 2 3 - 4 days a week In-Season Training							
Aerobic Climbing	Program 2 da	ys a week.					
Interval Sprint Climbing Program 2 1 day a week or Program 1 2 days a week							

Sailing

Activity Description						
5% ana	aerobic/aerobic	95%	pure aerobic			
Recovery Methods	s:					
90% act	ive recovery	10%	rest periods			
Acrobic Climbing	Dragnam (30 minuta prag).				
Time	Program (30 minute progr Description	am):		Target Heart Rate		
0 - 10	Warm Up Climbing			warm up to 80%		
10 - 25	Aerobic Climbing			maintain 80%		
10 - 23 25 - 30	Cool Down Climbing			cool down to 60%		
	C			cool down to 00%		
Interval Sprint Cl	imbing Program 1 (30 min	ute prog	gram):			
Time	Description			Target Heart Rate		
0 - 10	Warm Up Climbing			warm up to 80%		
10 - 25	Interval Sprint Climbing					
	Power Climbing for 10 second					
	Active Recovery climbing ti			0		
	Upper Limb Climbing for 10					
	Active Recovery climbing ti		ate reduces to 80%	6		
	Speed Climbing for 10 second					
	Active Recovery climbing ti			6		
	Lower Limb Climbing for 10					
	Active Recovery climbing ti		ate reduces to 80%	0		
	Repeat as many times as tim					
	Record peak heart rates to m	easure ir	nprovements			
25 - 30	Cool Down Climbing			cool down to 60%		
Interval Sprint Cl	imbing Program 2 (60 min	ute prog	gram):			
Time	Description	I 6		Target Heart Rate		
0 - 10	Warm Up Climbing			warm up to 80%		
10 - 20	Interval Sprint Climbing			1		
	Power Climbing for 10 second	nds				
	Active Recovery climbing for		onds			
	Upper Limb Climbing for 10					
	Active Recovery climbing for					
	Speed Climbing for 10 second					
	Active Recovery climbing for		onds			
	Lower Limb Climbing for 10					
	Active Recovery climbing for					
	repeat as many times as time					
	Record peak heart rates to m		nprovements			
20 - 40	Aerobic Climbing		1	maintain 75 - 80%		
40 - 50	Interval Sprint Climbing					
50 - 60	Cool Down Climbing			cool down to 60%		
Off-Season Training	C C					
	mbing Program 2 - 3 days a	week				
	int Climbing Program 1 1 da					
Pre-Season Training		ly u week				
Aerobic Climbing Program 2 days a week.						
	Interval Sprint Climbing Program 2 3 - 4 days a week					
In-Season Training						
	mbing Program 2 days a wee	ek.				
Interval Sprint Climbing Program 2 1 day a week or Program 1 2 days a week						

Activity Description							
Activity Descripti 80% an	aerobic	20%	anaero	bic/aerobic			
Recovery Method	ls:						
90% ac	tive recovery		10%	rest periods			
Aerobic Climbing	Aerobic Climbing Program (30 minute program):						
Time	Description				Target Heart Rate		
0 - 10	Warm Up Climbin	g			warm up to 80%		
10 - 25	U	•			maintain 80%		
25 - 30	Cool Down Climbi	ing			cool down to 60%		
Time	limbing Program 1 Description		ute prog	gram):	Target Heart Rate		
0 - 10	Warm Up Climbin	-			warm up to 80%		
10 - 25	Interval Sprint Clir	•					
	Power Climbing fo				900/		
	Active Recovery cl Upper Limb Climb				80%		
	Active Recovery cl	U			80%		
	Speed Climbing fo			The reduces to	8070		
	Active Recovery cl			rate reduces to	80%		
	Lower Limb Climb						
	Active Recovery cl	limbing	till hear	rate reduces to	80%		
	Repeat as many tin						
• • • • •	Record peak heart		measure	improvements			
25 - 30	Cool Down Climbi	ing			cool down to 60%		
Interval Sprint C	limbing Program 2	(30 min	ute prog	gram):			
Time	Description				Target Heart Rate		
0 - 10	Warm Up Climbin	-			warm up to 80%		
10 - 25	Interval Sprint Clir	•	anda				
	Power Climbing fo Active Recovery cl			econde			
	Upper Limb Climb						
	Active Recovery cl						
	Speed Climbing fo						
	Active Recovery cl			econds			
	Lower Limb Climb	oing for	15 secor	nds			
	Active Recovery cl	-					
	repeat as many tim						
25 20	Record peak heart		measure	improvements			
25 - 30	Cool Down Climbi	ing			cool down to 60%		
Off-Season Train			_				
	imbing Program 2 -						
Pre-Season Train	rint Climbing Program	1 1 02	iy a week				
	imbing Program 2 da	avs a wee	ek.				
	rint Climbing Program			veek			
In-Season Trainin							
	imbing Program 2 da						
Interval Sprint Climbing Program 2 1 day a week							

Skiing (slalom, jumping, downhill)

Activi	ty I	Dese	riptio	on:		,	
5% anaerobic/aerobic			95%	pure aerobic			
Recov	•			3:			
	90)%	acti	ve recovery	10%	rest periods	
Aerob	ic (Clin	ibing	Program (30 minute progra	am):		
		ime	0	Description			Target Heart Rate
	0	-	10	Warm Up Climbing			warm up to 80%
1	0	-	25	Aerobic Climbing			maintain 80%
2	25	-	30	Cool Down Climbing			cool down to 60%
Interv	al S	Spri	int Cli	imbing Program 1 (30 minu	te prog	gram):	
		ime		Description			Target Heart Rate
	0	-	10	Warm Up Climbing			warm up to 80%
1	0	-	25	Interval Sprint Climbing			
				Power Climbing for 20 secon			
				Active Recovery climbing til			0
				Upper Limb Climbing for 20			/
				Active Recovery climbing till Speed Climbing for 20 second		ate reduces to 80%	0
				Active Recovery climbing till		ate reduces to 80%	<u>/</u>
				Lower Limb Climbing for 20			0
				Active Recovery climbing til			/ 0
				Repeat as many times as time			
				Record peak heart rates to me		nprovements	
2	25	-	30	Cool Down Climbing		-	cool down to 60%
Intorv	പ	Inri	nt Cli	imbing Program 2 (60 minu	ite nroe	rem).	
Inter v		ime	int Ch	Description	ne prog	<u>, am).</u>	Target Heart Rate
	0		10	Warm Up Climbing			warm up to 80%
	0		20	Interval Sprint Climbing			······································
				Power Climbing for 10 secon	ds		
				Active Recovery climbing for			
				Upper Limb Climbing for 10			
				Active Recovery climbing for		onds	
				Speed Climbing for 10 second			
				Active Recovery climbing for			
				Lower Limb Climbing for 10			
				Active Recovery climbing for repeat as many times as time			
				Record peak heart rates to me			
2	0	-	40	Aerobic Climbing	asure m	nprovements	maintain 75 - 80%
	0		50	Interval Sprint Climbing			mamain 75 0070
	50		60	Cool Down Climbing			cool down to 60%
Off-Sea	asoi	n Tr	aining	g Program			
				nbing Program 2 - 3 days a w			
				nt Climbing Program 1 1 day	a week		
Pre-Sea				g Program	_		
				nbing Program 2 days a weel nt Climbing Program 2 3 - 4		veek	
In-Seas				in Chinoing 110grain 2 3 - 4	uays a w		
-ii Sea				nbing Program 2 days a weel	κ.		
				nt Climbing Program 2 1 day		or Program 1 2	days a week

Skiing (cross country)

Soccer (goalie)

Activity Description	on:					
80% anaerobic		20%	anaerobic/aerobic			
Recovery Methods:						
90% acti	ive recovery	10%	rest periods			
Aerobic Climbing	Program (30 minute progra	am).				
Time	Description		Target Heart Rate			
0 - 10	Warm Up Climbing		warm up to 80%			
10 - 25	Aerobic Climbing		maintain 80%			
25 - 30	Cool Down Climbing		cool down to 60%	,		
	C C	to mag				
Time	imbing Program 1 (30 minu Description	ne prog	Tam): Target Heart Rate			
0 - 10	Warm Up Climbing		warm up to 80%			
10 - 25	Interval Sprint Climbing		warm up to 80%			
10 - 25	Power Climbing for 5 second	c				
	Active Recovery climbing till		te reduces to 80%			
	Upper Limb Climbing for 5 s					
	Active Recovery climbing till		te reduces to 80%			
	Speed Climbing for 5 second					
	Active Recovery climbing till		te reduces to 80%			
	Lower Limb Climbing for 5 s					
	Active Recovery climbing till		te reduces to 80%			
	Repeat as many times as time	allows				
	Record peak heart rates to me	easure in	provements			
25 - 30	Cool Down Climbing		cool down to 60%	(
Interval Sprint Cli	imbing Program 2 (60 minu	ite nrog	ram).			
Time	Description	ne prog	Target Heart Rate			
0 - 10	Warm Up Climbing		warm up to 80%			
10 - 25	Interval Sprint Climbing		I I I I I I I I I I I I I I I I I I I			
	Power Climbing for 5 second	S				
	Active Recovery climbing for		onds			
	Upper Limb Climbing for 5 s					
	Active Recovery climbing for		onds			
	Speed Climbing for 5 seconds	s				
	Active Recovery climbing for	r 15 seco	onds			
	Lower Limb Climbing for 5 s	seconds				
	onds					
	repeat as many times as time					
	Record peak heart rates to me	easure in	-			
25 - 35	Aerobic Climbing		maintain 75 - 80%)		
35 - 50	Interval Sprint Climbing					
50 - 60	Cool Down Climbing		cool down to 60%	1		
Off-Season Training						
Aerobic Climbing Program 2 - 3 days a week.						
Interval Sprint Climbing Program 1 1 day a week						
Pre-Season Training						
Aerobic Climbing Program 2 days a week.						
Interval Sprint Climbing Program 2 3 - 4 days a week In-Season Training						
8	nbing Program 2 days a week	7				
	int Climbing Program 2 1 day					
interval oprint enholing riogram 2 - r day a week						

Soccer (halfback, fullback)

Activity Descript		. (nouch, runouch)		
	aerobic	20%	anaerobic/aerobic	20%	pure aerobic
Recovery Metho					
95% act	ive recovery	5%	rest periods		
Aerobic Climbin	g Program (30 mi	inute p	rogram):		
Time	Description	_	-		Heart Rate
0 - 10	Warm Up Climbing	g			up to 80%
10 - 25	Aerobic Climbing				in 80%
25 - 30	Cool Down Climbi	ng		cool do	own to 60%
Interval Sprint (n 1 (30 i	minute program):		
Time	Description				Heart Rate
0 - 10	Warm Up Climbing	-		warm u	up to 80%
10 - 25	Interval Sprint Clin		anda		
	Power Climbing fo		till heart rate reduces to 8	200%	
	Speed Climbing for			3070	
			till heart rate reduces to 8	30%	
	Lower Limb Climb	•		/ -	
		-	till heart rate reduces to 8	80%	
	Repeat as many tim				
			measure improvements		
25 - 30	Cool Down Climbi	ng		cool do	own to 60%
Interval Sprint Cl	imbing Program 2	(60 min	ute program):		
Time	Description				Heart Rate
0 - 10	Warm Up Climbing			warm u	up to 80%
10 - 25	Interval Sprint Clin	-	1		
	Power Climbing fo				
	Active Recovery cl Upper Limb Climb				
	Active Recovery cl				
	Speed Climbing for				
	Active Recovery cl				
	Lower Limb Climb	oing for 1	10 seconds		
	Active Recovery cl				
	repeat as many time				
25 25	-	rates to 1	measure improvements	• .	
25 - 35	Aerobic Climbing	1.		mainta	in 75 - 80%
35 - 50 50 - 60	Interval Sprint Clin Cool Down Climbi			anal da	own to 60%
		ng		C001 U	Jwii to 0070
Off-Season Training	g Program mbing Program 2 - 3	3 dave a v	week		
	int Climbing Program				
Pre-Season Training			J		
	mbing Program 2 da				
	int Climbing Program	2 3 - 4	days a week		
In-Season Training Aerobic Cliu	mbing Program 2 da	AVS 9 1100	k		
			y a week or Program 1 2	days a w	reek
~p	00-min		,		

Softball

Activity Descrip	tion:			
80% ana	aerobic	20%	anaerobic/aerob	pic
Recovery Metho	de			
•	tive recovery	5%	rest periods	
<i>7570</i> det	ive recovery	570	rest periods	
Aerobic Climbin	ng Program (30 minute pr	ogram	l):	
Time	Description			Target Heart Rate
0 - 10	Warm Up Climbing			warm up to 80%
10 - 25	Aerobic Climbing			maintain 80%
25 - 30	Cool Down Climbing			cool down to 60%
Interval Sprint (Climbing Program 1 (30 r	ninute	program):	
Time	Description			Target Heart Rate
0 - 10	Warm Up Climbing			warm up to 80%
10 - 25	Interval Sprint Climbing			
	Power Climbing for 5 secon			200/
	Active Recovery climbing t		rate reduces to 8	0%
	Speed Climbing for 5 secon Active Recovery climbing t		rata raducas to 8	2004
	Lower Limb Climbing for 5			1070
	Active Recovery climbing to			30%
	Repeat as many times as tin			070
	Record peak heart rates to n			
25 - 30	Cool Down Climbing			cool down to 60%
	_			
Time	Climbing Program 2 (30 r Description	ninute	program):	Target Heart Rate
0 - 10	Warm Up Climbing			warm up to 80%
10 - 25	Interval Sprint Climbing			warm up to 0070
10 20	Power Climbing for 5 secon	nds		
	Active Recovery climbing f		econds	
	Speed Climbing for 5 secon			
	Active Recovery climbing f		econds	
	Lower Limb Climbing for 5			
	Active Recovery climbing f	for 15 se	econds	
	repeat as many times as tim	e allows	5	
	Record peak heart rates to n	neasure	improvements	
25 - 30	Cool Down Climbing			cool down to 60%
Off-Season Train	ning Program			
	limbing Program 2 - 3 days	s a weel	ζ.	
	orint Climbing Program 1 1			
		2		
Pre-Season Trai				
	limbing Program 2 days a		1	
Interval Sp	orint Climbing Program 2 3	5 - 4 day	s a week	
In-Season Train	ing			

Aerobic Climbing Program -- 2 days a week. Interval Sprint Climbing Program 2 -- 1 day a week

Speed Skating

Activity Descrip	otion:		0			
75% anaerobic/aerobic		25%	pure aerobic			
Recovery Methe	ods:					
95% active recovery 5% rest periods						
	ng Program (30 minute	program	ı):			
Time	Description			Target Heart Rate		
0 - 10	Warm Up Climbing			warm up to 80%		
10 - 25	Aerobic Climbing			maintain 80%		
25 - 30	Cool Down Climbing			cool down to 60%		
Interval Sprint Time	Climbing Program 1 (3	0 minute	program):	Trans of Hannel Darks		
0 - 10	Description Warm Up Climbing			<i>Target Heart Rate</i> warm up to 80%		
10 - 25	Interval Sprint Climbing			warm up to 80%		
10 - 25	Power Climbing for 15 s	econds				
	Active Recovery climbin		t rate reduces to S	20%		
	Speed Climbing for 15 se		i Tale Teduces to a	30 %		
	Active Recovery climbin		t rate reduces to S	20%		
	Lower Limb Climbing for	•		5070		
	Active Recovery climbin			30%		
	Repeat as many times as			5070		
	Record peak heart rates t					
25 - 30	Cool Down Climbing	0 measure	mprovements	cool down to 60%		
		•				
-	Climbing Program 2 (3	0 minute	program):	<i>т</i> . и р		
Time	Description			Target Heart Rate		
0 - 10	Warm Up Climbing			warm up to 80%		
10 - 25	Interval Sprint Climbing					
	Power Climbing for 15 s		1			
	Active Recovery climbin		econds			
	Speed Climbing for 15 se		1.			
	Active Recovery climbin					
	Lower Limb Climbing for					
	Active Recovery climbin					
	repeat as many times as t					
25 20	Record peak heart rates t	o measure	improvements	1.1 ((00)		
25 - 30	Cool Down Climbing			cool down to 60%		
Off-Season Trai	ining Program					
	limbing Program 2 - 3 d	lays a weel	k.			
	print Climbing Program 1 -	-				
Pre-Season Tra	ining Program					
	limbing Program 2 days	a week				
	print Climbing Program 2 -		ys a week			
In-Season Train	ling					

Aerobic Climbing Program -- 2 days a week. Interval Sprint Climbing Program 2 -- 1 day a week

Surfing

	Activi	ity De	scription:		e		
	30%		naerobic	65%	anaerobic/aerobic	5%	pure aerobic
Dogo	NORN N	latha	da.				
Neco	very M 90%		ctive recovery	10%	rest periods		
			-		-		
Aero			g Program (30 min	ute prog	ram):	T	
	Time 0 -	2 10	Description	ina		-	t Heart Rate
	0 - 10 -	25	Warm Up Climbi Aerobic Climbin				up to 80% ain 80%
	25 -	23 30	Cool Down Clim	•			lown to 60%
	25 -	30	COOI DOWII CIIIII	ong		00010	10WII 10 00%
Inter	_		limbing Program	1 (30 min	ute program):	-	
	Time		Description	•			t Heart Rate
	0 -	10	Warm Up Climbi			warm	up to 80%
	10 -	25	Interval Sprint Cl	-	onda		
			Power Climbing		till heart rate reduces to	80%	
			Upper Limb Clin			/ 00 /0	
					till heart rate reduces to	0 80%	
			Speed Climbing	•		/ 00/0	
					till heart rate reduces to) 80%	
			Lower Limb Clir				
					till heart rate reduces to	o 80%	
			Repeat as many t	imes as ti	me allows		
			Record peak hear	rt rates to	measure improvements		
	25 -		Cool Down Clim			cool c	lown to 60%
Inter			limbing Program	2 (30 min	ute program):	_	
	Time		<i>Description</i>				t Heart Rate
	0 -	10	Warm Up Climbi	-		warm	up to 80%
	10 -	25	Interval Sprint Cl Power Climbing		onda		
			Active Recovery				
			Upper Limb Clin				
			Active Recovery				
			Speed Climbing				
			Active Recovery				
			Lower Limb Clir				
			Active Recovery				
			repeat as many ti	mes as tin	ne allows		
			Record peak hear	rt rates to	measure improvements		
	25 -	30	Cool Down Clim	bing		cool c	lown to 60%
Off-S			ning Program				
			imbing Program 2				
Dra (rint Climbing Program	m I I da	iy a week		
Pre-a			ning Program limbing Program 2	dave a we	ak		
			rint Climbing Program				
In-Se	eason T	-		U U	· · · · · · · · · · · · · · · · · · ·		
			bing Program 2 da	ys a week.			
			t Climbing Program 2				

C	•	•	120	1	10 0 \	
N	wim	mina	(50)	VA	diving)	
D	** 1111	1111112	120	vu.	uiviii2/	
		0	`	• •	0/	

		Swimming	(50)	yd, diving)	
Activi	ty Description:				
	98% anaero	obic	2%	anaerobic/aero	bic
Recov	ery Methods:				
	90% active red	covery	10%	rest periods	
Aerob	ic Climbing Pr	ogram (30 minute prog	ram):		
	Time	Description			Target Heart Rate
	0 - 10	Warm Up Climbing			warm up to 80%
	10 - 25	Aerobic Climbing			maintain 80%
	25 - 30	Cool Down Climbing			cool down to 60%
Interv	al Sprint Clim	bing Program 1 (30 min	ute Pro	ogram):	
	Time	Description			Target Heart Rate
	0 - 10	Warm - Up Climbing			warm up to 80%
	10 - 25	Interval Sprint			
		Power Climber for 20 s			
		Active Recovery climb			ces to 80%
		Upper Limb Climbing			
		Active Recovery climb			ces to 80%
		Speed climbing for 20			
		Active Recovery climb	•		ces to 80%
		Lover Limb climbing f			
		Active Recovery climb	•		ces to 80%
		Repeat as many times a			
		Record peak heart rates	s to me	asure improveme	nts
2	5 - 30	Cool Down Climbing			cool down to 60%
Interv	al Sprint Clim	bing Program 2 (30 min Description	ute pro	ogram)	Target Heart Rate
	0 - 10	Warm Up Climbing			warm up to 80%
	10 - 25	Interval Sprint Climb	ing		-
		Power Climbing for 20		ls	
		Active Recovery climb			
		Upper limb Climbing f			
		Active Recovery climb			
		Speed Climbing for 20			
		Active Recovery climb			
		Lower limb Climbing f	for 20 s	econds	
		Active Recovery for 45	5 secon	ds	
		Repeat as many times a	as time	allows	
		Record peak heart rate	to mea	sure improvemen	ts
	24 - 30	Cool Down Climbing			cool down to 60%
Off – S	Season Trainin	g Program			
	Aerobic Climb	oing Program #2 – 3 days	a weel	K	
	-	t Climbing Program #1 - 1	1 day a	week	
Pre Se	eason Training				
		oing Program – 2 days a v			
	Interval Sprint	t Climbing Program #2 –	3-4 day	/s a week	
In- Se	ason Training				
		oing Program - 2 days a v			
	-	t Climbing Program #2 1	-		
90%	active recover	y 10%	rest p	eriods	

Swimming (100 yd)

		mming (10	j yu)	
Activity Descripti	on:			
80% an	aerobic 15%	anaerobic/aerobi	c 5%	pure aerobic
Dogovory Mothod	a.			
Recovery Method 90% ac	tive recovery	10% 1	est periods	
7070 ac	uve recovery	1070	est periods	
Aerobic Climbing	g Program (30 minu	ite program):		
Time	Description			Target Heart Rate
0 - 10	Warm Up Climbin	g		warm up to 80%
10 - 25	U			maintain 80%
25 - 30	Cool Down Climb	ing		cool down to 60%
Interval Sprint C	limbing Program 1	(30 minute progr	am):	
Time	Description	(e e)*	Target Heart Rate
0 - 10	Warm Up Climbin	g		warm up to 80%
10 - 25	Interval Sprint Clin			
	Power Climbing for			
	Active Recovery c		ate reduces to	80%
	Upper Limb Climb			
	Active Recovery c	•		80%
	Speed Climbing fo			
	Active Recovery c		ate reduces to	80%
	Lower Limb Climb			
	Active Recovery c			80%
	Repeat as many tir	nes as time allows		
	Record peak heart	rates to measure in	nprovements	
25 - 30	Cool Down Climb			cool down to 60%
Intorval Sprint C	limbing Drogram ?	(30 minuto progr	om).	
Time	limbing Program 2 Description	(So minute progr	alli).	Target Heart Rate
0 - 10	Warm Up Climbin	σ		warm up to 80%
10 - 25	Interval Sprint Clin	-		warm up to 0070
10 25	Power Climbing for			
	Active Recovery c		onds	
	Upper Limb Climb	•		
	Active Recovery c	-		
	Speed Climbing fo		51145	
	Active Recovery c		ands	
	Lower Limb Climb	•		
	Active Recovery c			
	repeat as many tim	•	ond b	
	Record peak heart		nprovements	
25 - 30	Cool Down Climb		nprovenients	cool down to 60%
Off-Season Train	8 8	2 1		
	mbing Program 2 - rint Climbing Program			
Pre-Season Train		1 1 day a week		
	mbing Program 2 d	avs a week		
	rint Climbing Program		ek	
In-Season Trainin				
	mbing Program 2 d	ays a week.		
	rint Climbing Program			
		-		
		41		

...

Swimming (200 yd)

Activity Descri					
30%	anaerobic	65%	anaerobic/aerobic	5%	pure aerobic
Recovery Metl	hods:				
90%	active recovery	10%	rest periods		
	ing Program (30 minut	te progr	am):		
Time	Description				Heart Rate
0 - 10	1 5	5			1p to 80%
	5 Aerobic Climbing			maintai	
25 - 30	0 Cool Down Climbi	ng		cool do	own to 60%
_	t Climbing Program 1 ((30 min t	ute program):		
Time	Description			-	Heart Rate
0 - 10	1 1	-		warm u	ıp to 80%
10 - 2:	1		1		
	Power Climbing for				
			till heart rate reduces to 8	,0%	
	Upper Limb Climb	•		200/	
	-	-	till heart rate reduces to 8	0%	
	Speed Climbing for		till heart rate reduces to 8	200%	
	Lower Limb Climb	-		070	
			till heart rate reduces to 8	<u>د</u>	
	Repeat as many tim	•		070	
			neasure improvements		
25 - 30			neusure improvements	cool do	own to 60%
		0	uto nuoquone).		
Time	t Climbing Program 2 (Description	(30 mini	ute program):	Taraat	Heart Rate
0 - 10		7			ip to 80%
10 - 2	1 1	-		warm a	ip to 0070
10 2.	Power Climbing for		onds		
	Active Recovery cl				
	Upper Limb Climb				
	Active Recovery cl	÷			
	Speed Climbing for				
	Active Recovery cl				
	Lower Limb Climb				
	Active Recovery cl				
	repeat as many time	-			
			neasure improvements		
25 - 30			1	cool do	own to 60%
Off-Season Tra	aining Program				
	Climbing Program 2 - 3	3 days a v	week.		
Interval	Sprint Climbing Program	1 1 da	y a week		
	aining Program				
	Climbing Program 2 da				
	Sprint Climbing Program 2	2 3 - 4	ays a week		
In-Season Trai	Climbing Program 2 da	WE 9 WAA	k		
	Sprint Climbing Program 2				
	r	1 44	-		
			40		

Swimming (400,500 yd)

	mmg	(4 00,500 yu)		
Activity Description:				
20% anaerobic	55%	anaerobic/aerobic	25%	pure aerobic
Recovery Methods:				
90% active recovery	10%	rest periods		
Aerobic Climbing Program (30 minu	ite nrog	ram)•		
Time Description	ne prog	(ann).	Target	Heart Rate
0 - 10 Warm Up Climbing	σ			up to 80%
10 - 25 Aerobic Climbing	>			in 80%
25 - 30 Cool Down Climbi	nσ			own to 60%
	C 001 U	Jwn to 0070		
Interval Sprint Climbing Program 1	(30 min	ute program):	-	II D
Time Description				Heart Rate
0 - 10 Warm Up Climbing	-		warm i	up to 80%
10 - 25 Interval Sprint Clin				
Power Climbing fo				
		ill heart rate reduces to 80)%	
Upper Limb Climb	•		NO /	
		ill heart rate reduces to 80	9%	
Speed Climbing for			0/	
		ill heart rate reduces to 80	9%0	
Lower Limb Climb			0/	
Repeat as many tim		ill heart rate reduces to 80	0%0	
25 - 30 Cool Down Climbi		neasure improvements	anal de	own to 60%
	•		C001 u	Jwii to 00%
Interval Sprint Climbing Program 2	(60 min	ute program):		
Time Description				Heart Rate
0 - 10 Warm Up Climbing			warm u	up to 80%
10 - 25 Interval Sprint Clin	•			
Power Climbing fo				
Active Recovery cl	•			
Upper Limb Climb				
Active Recovery cl	•			
Speed Climbing for				
Active Recovery cl	-			
Lower Limb Climb				
Active Recovery cl				
repeat as many time				
1	fales to fi	neasure improvements		in 75 900/
25-35Aerobic Climbing35-50Interval Sprint Clim	nhina		mainta	in 75 - 80%
35-50Interval Sprint Clin50-60Cool Down Climbi			anal de	own to 60%
	ng		C001 u	Jwii to 00%
Off-Season Training Program	2.1			
Aerobic Climbing Program 2 -	•			
Interval Sprint Climbing Program	1 1 da	ay a week		
Pre-Season Training Program	love o me	ak		
Aerobic Climbing Program 2 d				
Interval Sprint Climbing Program In-Season Training	12 3-2	+ uays a week		
Aerobic Climbing Program 2 d	ave a wee	sk		
Interval Sprint Climbing Program			2 days a w	veek
	_ 140	, s or rogram r		

Swimming (1500,1650 yd)

Activity Descript					
10% a	anaerobic 20	0% anaero	bic/aerobic	70%	pure aerobic
Recovery Metho	ds:				
90% a	active recovery	10%	rest periods		
Aerobic Climbin	g Program (30 mi	inute progra	m):		
Time	Description)*	Target	Heart Rate
0 - 10	Warm Up Clin				up to 80%
10 - 25	Aerobic Climb			maintai	
25 - 30	Cool Down Cl	•			own to 60%
		•			
Time	Climbing Progran Description		e program):	Taraat	Ugart Pata
0 - 10	-				Heart Rate
10 - 25	Warm Up Clin	•		warm u	1p to 80%
10 - 23	Interval Sprint	•	nda		
	Power Climbir	-		800/	
			Il heart rate reduces to	80%	
	Upper Limb C		Il heart rate reduces to	80%	
				80%	
	Speed Climbin		Ill heart rate reduces to	8004	
	Lower Limb C	• •		8070	
		-	Il heart rate reduces to	80%	
	Repeat as man			80%	
			neasure improvements		
25 - 30	Cool Down Cl		leasure improvements	appl de	own to 60%
25 - 50	Cool Dowll Cl	mong		C001 00	JWII 10 00%
Interval Sprint C	Climbing Program		e program):		
Time	Description			Target .	Heart Rate
0 - 10	Warm Up Clin	-		warm u	ıp to 80%
10 - 20	Interval Sprint				
	Power Climbir				
	Active Recove				
	Upper Limb C	•			
	Active Recove				
	Speed Climbin	-			
	Active Recove	• •			
	Lower Limb C				
	Active Recove				
	repeat as many				
			neasure improvements		
20 - 40	Aerobic Climb	0		maintai	in 75 - 80%
40 - 50	1				
50 - 60	Cool Down Cl	imbing		cool do	own to 60%
Off-Season Train	ing Program				
	Climbing Program -	- 2 - 3 days a	week.		
	print Climbing Pro				
Pre-Season Train		-			
Aerobic C	Climbing Program -	- 2 days a wee	ek.		
	print Climbing Pro	gram 2 3 - 4	4 days a week		
In-Season Trainin					
	Climbing Program -				_
Interval S	print Climbing Pro	gram 2 1 da	ay a week or Program 1	2 days a w	'eek

Tennis

Activity Des 70%	cription: anaerobic	20%	anaerobic/aerobic	10%	pure aerobic
7070	anacrobic	2070	anacione/acione	1070	pure aerobie
Recovery M					
60%	active recove	ery 40%	rest periods		
Aerobic Cli	mbing Progra	m (30 minute p	program):		
Time		ription	0 /	Target	Heart Rate
	10 Warm U				up to 80%
	25 Aerobic	-			uin 80%
25 -	30 Cool Do	wn Climbing		cool d	own to 60%
Interval Spr Time		Program 1 (30 ription	minute program):	Taraet	Heart Rate
		p Climbing			up to 80%
		Sprint Climbing			
		limbing for 5 seco	onds		
			till heart rate reduces to	80%	
		imbing for 5 seco			
			till heart rate reduces to	80%	
		imb Climbing for			
			till heart rate reduces to	80%	
	-	s many times as ti			
25 -			measure improvements	and d	own to 60%
25 -	50 C001 D0	wn Climbing		C001 U	0wii t0 00%
Interval Spr	int Climbing	Program 2 (60	minute program):		
Time		ription			Heart Rate
		p Climbing		warm	up to 80%
10 -		Sprint Climbing			
		limbing for 5 seco			
		ecovery climbing			
	-	limbing for 5 seco			
		ecovery climbing			
		imb Climbing for ecovery climbing			
		many times as tir			
	-	-	measure improvements		
25 -		Climbing	medsure improvements	mainta	uin 75 - 80%
		Sprint Climbing		manna	
		wn Climbing		cool d	own to 60%
		Ū.			
	aining Program	ram 2 - 3 days a	waak		
		g Program 1 1 d			
	aining Program		uj u week		
	0 0	gram 2 days a we	eek.		
	-	g Program 2 3 -	4 days a week		
In-Season Tra		2.1	1		
		ram 2 days a we		2 days a -	wook
merv	ai Spiint Chindh	g Flograff 2 1 0	ay a week or Program 1	∠ uays a v	VCCK

Activity Descripti	on:		(•••••)	
90% an	aerobic/aerobic	10%	pure aerobic	
Recovery Method	s:			
90% ac	tive recovery	10%	rest periods	
Aerobic Climbing	Program (30 minute prog	gram):		
Time	Description			Target Heart Rate
0 - 10	Warm Up Climbing			warm up to 80%
10 - 25 25 - 30	Aerobic Climbing Cool Down Climbing			maintain 80% cool down to 60%
	C C			cool down to 00%
Interval Sprint Cl Time	limbing Program 1 (30 mi Description	nute pro	gram):	Target Heart Rate
0 - 10	Warm Up Climbing			warm up to 80%
10 - 25	Interval Sprint Climbing			warm ap to oo /o
	Power Climbing for 5 sec	onds		
	Active Recovery climbing	g till hear	t rate reduces to	80%
	Upper Limb Climbing for			
	Active Recovery climbing		t rate reduces to	80%
	Speed Climbing for 5 sec		4	900/
	Active Recovery climbing Lower Limb Climbing for			80%
	Active Recovery climbing			80%
	Repeat as many times as t	0		0070
	Record peak heart rates to			
25 - 30	Cool Down Climbing		-	cool down to 60%
Interval Sprint Cl	limbing Program 2 (30 mi	nute pro	gram):	
Time	Description	-		Target Heart Rate
0 - 10	Warm Up Climbing			warm up to 80%
10 - 25	Interval Sprint Climbing			
	Power Climbing for 5 sec		aaanda	
	Active Recovery climbing Upper Limb Climbing for			
	Active Recovery climbing			
	Speed Climbing for 5 sec			
	Active Recovery climbing		econds	
	Lower Limb Climbing for	r 5 secon	ds	
	Active Recovery climbing	-		
	repeat as many times as ti			
25 20	Record peak heart rates to	o measure	improvements	
25 - 30	Cool Down Climbing			cool down to 60%
Off-Season Traini				
	mbing Program 2 - 3 days a int Climbing Program 1 1 d		<i>r</i>	
Pre-Season Train		lay a weer	x	
	mbing Program 2 days a w	eek.		
*	int Climbing Program 2 3 -	- 4 days a	week	
In-Season Trainin		1		
	mbing Program 2 days a w int Climbing Program 2 1 d		r.	
inter var opr	in chinoing riogram 2 10	aay a weer		

Track (field events)

46

Track (100/220 yd)

Activity Descri	ption:		•
98% a	naerobic	2%	anaerobic/aerobic
Recovery Meth	ods:		
-	ctive recovery	80%	rest periods
Aerobic Climb	ing Program (30 minute p	rogram	ı):
Time	Description	_	Target Heart Rate
0 - 10	Warm Up Climbing		warm up to 80%
10 - 25	Aerobic Climbing		maintain 80%
25 - 30	Cool Down Climbing		cool down to 60%
Interval Sprint	Climbing Program 1 (30)	minute	program):
Time	Description		Target Heart Rate
0 - 10	Warm Up Climbing		warm up to 80%
10 - 25	Interval Sprint Climbing		
	Power Climbing for 15 seco		
	Active Recovery climbing	till heart	t rate reduces to 80%
	Speed Climbing for 15 seco	onds	
	Active Recovery climbing	till heart	t rate reduces to 80%
	Lower Limb Climbing for	15 secor	ıds
	Active Recovery climbing	till heart	t rate reduces to 80%
	Repeat as many times as tir	ne allow	VS
	Record peak heart rates to r		
25 - 30	Cool Down Climbing		cool down to 60%
Interval Sprint	Climbing Program 2 (30)	minute	program):
Time	Description		Target Heart Rate
0 - 10	Warm Up Climbing		warm up to 80%
10 - 25	Interval Sprint Climbing		
	Power Climbing for 10 second		
	Active Recovery climbing t		
	Speed Climbing for 10 seco		
	Active Recovery climbing		
	Lower Limb Climbing for		
	Active Recovery climbing		
	repeat as many times as tim		
	Record peak heart rates to r	neasure	
25 - 30	Cool Down Climbing		cool down to 60%
Off-Season Tra	nining Program		
	Climbing Program 2 - 3 day	rs a weel	k.
	Sprint Climbing Program 1		
Dro Soccon Tr	ining Drogram		
	aining Program Climbing Program 2 days a	week.	

Interval Sprint Climbing Program 2 -- 3 - 4 days a week.

In-Season Training

Aerobic Climbing Program -- 2 days a week. Interval Sprint Climbing Program 2 -- 1 day a week

Track (440 yd)

Activ	ity	De	script	ion:					
	8	0%	ana	aerobic	15%	anaerobic/aerobic		5%	pure aerobic
Reco	ver	v N	letho	ds:					
		0%		ive recovery		10% res	t periods		
Aero			mbin	0 0		inute program):			
		ïme		Descripti					Heart Rate
		-	10	Warm Up C		g			up to 80%
				Aerobic Clir					ain 80%
	25	-	30	Cool Down	Climbi	ing		cool d	own to 60%
Inter		-	rint (0	0	n 1 (30 minute pro	gram):	π.	II D
	0^{T}	ïme	10	Descripti		_			Heart Rate
			10	Warm Up Cl		-		warm	up to 80%
	10	-	25	Interval Spri Power Climb					
						limbing till heart rate	raduces to 8	004	
				Speed Climb			reduces to 8	0%	
				-	•	limbing till heart rate	reduces to 8	0%	
						bing for 15 seconds	icultes to 8	070	
						limbing till heart rate	reduces to 8	0%	
						nes as time allows	reduces to o	070	
				•	•	rates to measure imp	rovements		
	25	_	30	Cool Down		-	ovements	cool d	own to 60%
	20		50	Cool Down	Cinnol	ing		c oor a	own to 0070
Inter	val	Sp	rint (Climbing Pro	ogran	n 2 (60 minute pro	gram):		
Inter		Sp: Sime	rint (Climbing Pro Descripti		n 2 (60 minute pro	gram):	Target	Heart Rate
Inter		ïme	rint (10		ion	_	gram):		<i>Heart Rate</i> up to 80%
	T = 0	ïme	10	Descripti	ion limbing	g	gram):		
	T = 0	ïme -	10	<i>Descripti</i> Warm Up C	on limbin nt Clir	g nbing	gram):		
	T = 0	ïme -	10	Descripti Warm Up Cl Interval Spri Power Climb	<i>on</i> limbing nt Clir bing fo	g nbing	_		
	T = 0	ïme -	10	Descripti Warm Up Cl Interval Spri Power Climb	<i>on</i> limbing nt Clir bing fo very cl	g nbing or 40 seconds limbing for 60 second	_		
	T = 0	ïme -	10	Descripti Warm Up Cl Interval Spri Power Climb Active Reco Speed Climb	ion limbing int Clir bing fo very cl bing fo	g nbing or 40 seconds limbing for 60 second	ds		
	T = 0	ïme -	10	Descripti Warm Up Cl Interval Spri Power Climb Active Reco Speed Climb Active Reco	ion limbing int Clir bing fo very cl ping fo very cl	g nbing or 40 seconds limbing for 60 second r 40 seconds	ds		
	T = 0	ïme -	10	Descripti Warm Up Cl Interval Spri Power Climb Active Reco Speed Climb Active Reco Lower Limb	int Clin int Clin bing fo very cl bing fo very cl very cl	g nbing or 40 seconds limbing for 60 second r 40 seconds limbing for 60 second	ds ds		
	T = 0	ïme -	10	Descripti Warm Up Cl Interval Spri Power Climb Active Reco Speed Climb Active Reco Lower Limb Active Reco	ion limbing int Clir bing fo very cl ory cl very cl climb very cl	g nbing or 40 seconds limbing for 60 second r 40 seconds limbing for 60 seconds ping for 40 seconds	ds ds		
	T = 0	ïme -	10	Descripti Warm Up Cl Interval Spri Power Climb Active Reco Speed Climb Active Reco Lower Limb Active Reco repeat as ma	int Clir bing fo very cl bing fo very cl climb very cl very cl ny tim	g nbing or 40 seconds limbing for 60 second r 40 seconds limbing for 60 seconds bing for 40 seconds limbing for 60 second	ds ds ds		
	T = 0	ime - -	10	Descripti Warm Up Cl Interval Spri Power Climb Active Reco Speed Climb Active Reco Lower Limb Active Reco repeat as ma	int Clir bing fo very cl bing fo very cl Climb very cl ny tim heart	g nbing or 40 seconds limbing for 60 second r 40 seconds limbing for 60 seconds limbing for 60 seconds limbing for 60 second es as time allows	ds ds ds	warm	
	7 0 10	ime - -	10 25	Descripti Warm Up Cl Interval Spri Power Climb Active Reco Speed Climb Active Reco Lower Limb Active Reco repeat as ma Record peak	int Clir bing fo very cl bing fo very cl Climb very cl ny tim theart nbing	g nbing or 40 seconds limbing for 60 second r 40 seconds limbing for 60 seconds limbing for 60 seconds limbing for 60 second es as time allows rates to measure impr	ds ds ds	warm	up to 80%
	<i>T</i> 0 10	- - -	10 25 35	Descripti Warm Up Cl Interval Spri Power Climb Active Reco Speed Climb Active Reco Lower Limb Active Reco repeat as ma Record peak Aerobic Clim	int Clir bing fo very cl bing fo very cl climb very cl ny tim heart nbing nt Clir	g nbing or 40 seconds limbing for 60 second r 40 seconds limbing for 60 seconds limbing for 60 seconds limbing for 60 second es as time allows rates to measure impu- nbing	ds ds ds	warm	up to 80%
	<i>T</i> 0 10 25 35 50	- - -	10 25 35 50 60	Descripti Warm Up Cl Interval Spri Power Climb Active Reco Speed Climb Active Reco Lower Limb Active Reco repeat as ma Record peak Aerobic Clir Interval Spri Cool Down	int Clir bing fo very cl bing fo very cl climb very cl ny tim heart nbing nt Clir	g nbing or 40 seconds limbing for 60 second r 40 seconds limbing for 60 seconds limbing for 60 seconds limbing for 60 second es as time allows rates to measure impu- nbing	ds ds ds	warm	up to 80% ain 75 - 80%
	<i>T</i> 0 10 25 35 50 easo	ime - - - - - - - - - - - - - - - - - -	10 25 35 50 60 raining	Descripti Warm Up Cl Interval Spri Power Climb Active Reco Speed Climb Active Reco Lower Limb Active Reco repeat as ma Record peak Aerobic Clir Interval Spri Cool Down	ion limbing int Clir bing fo very cl o Climb very cl o Climb very cl ny tim heart nbing int Clir Climbi	g nbing or 40 seconds limbing for 60 second r 40 seconds limbing for 60 seconds limbing for 60 seconds limbing for 60 second es as time allows rates to measure impo nbing ing	ds ds ds	warm	up to 80% ain 75 - 80%
	<i>T</i> 0 10 25 35 50 easo A	- - - - - - - - - - - - - - - - - - -	10 25 35 50 60 raining	Descripti Warm Up Cl Interval Spri Power Climb Active Reco Speed Climb Active Reco Lower Limb Active Reco repeat as ma Record peak Aerobic Clir Interval Spri Cool Down O gProgram	ion limbing int Clir bing fo very cl or climb very cl or climb very cl ny tim heart nbing nt Clir Climbi	g mbing or 40 seconds limbing for 60 second r 40 seconds limbing for 60 seconds limbing for 60 seconds limbing for 60 second es as time allows rates to measure impo nbing ing 3 days a week.	ds ds ds	warm	up to 80% ain 75 - 80%
Off-Se	т 0 10 25 35 50 еазо А Ін	ime - - - - - - - - - - - - - - - - - - -	10 25 35 50 60 raining bic Clin val Spri	Descripti Warm Up Cl Interval Spri Power Climb Active Reco Speed Climb Active Reco Lower Limb Active Reco repeat as ma Record peak Aerobic Clir Interval Spri Cool Down O gProgram	ion limbing int Clir bing fo very cl or climb very cl or climb very cl ny tim heart nbing nt Clir Climbi	g nbing or 40 seconds limbing for 60 second r 40 seconds limbing for 60 seconds limbing for 60 seconds limbing for 60 second es as time allows rates to measure impo nbing ing	ds ds ds	warm	up to 80% ain 75 - 80%
Off-Se	Т 0 10 225 35 50 еазоо А Іп еазоо А	ime - - - - - - - - - - - - - - - - - - -	10 25 35 50 60 raining oic Clin 'al Spri raining oic Clin	Descripti Warm Up Cl Interval Spri Power Climb Active Reco Speed Climb Active Reco Lower Limb Active Reco repeat as ma Record peak Aerobic Clir Interval Spri Cool Down O Program nbing Program int Climbing Pr g Program	ion limbing int Clir bing fo very cl o Climb very cl o Climb very cl ny tim theart r nbing nt Clir climbi	g mbing or 40 seconds limbing for 60 second r 40 seconds limbing for 60 second bing for 40 seconds limbing for 60 second es as time allows rates to measure impo nbing ing 3 days a week. 1 1 day a week ays a week.	ds ds ds	warm	up to 80% ain 75 - 80%
Off-So Pre-So	7 0 10 25 35 50 easo A Ir easo A Ir	ime - - - - - - - - - - - - - - - - - - -	10 25 35 50 60 raining bic Clin raining bic Clin raining bic Clin raining	Descripti Warm Up Cl Interval Spri Power Climb Active Reco Speed Climb Active Reco Lower Limb Active Reco repeat as ma Record peak Aerobic Clir Interval Spri Cool Down O Program nbing Program int Climbing Pr g Program	ion limbing int Clir bing fo very cl o Climb very cl o Climb very cl ny tim theart r nbing nt Clir climbi	g mbing or 40 seconds limbing for 60 second r 40 seconds limbing for 60 seconds limbing for 60 second es as time allows rates to measure impo- nbing ing 3 days a week. 1 1 day a week	ds ds ds	warm	up to 80% ain 75 - 80%
Off-Se	Т 0 10 25 35 50 еазоо А Гг еазоо А Гг азоп	ime - - - - - - - - - - - - - - - - - - -	10 25 35 50 60 raining bic Clin raining bic Clin raining	Descripti Warm Up Cl Interval Spri Power Climb Active Reco Speed Climb Active Reco Lower Limb Active Reco repeat as ma Record peak Aerobic Clir Interval Spri Cool Down g Program mbing Program mbing Program mbing Program	ion limbing int Clir bing fo very cl o Climb very cl ny tim heart r nbing int Clir climbi	g mbing or 40 seconds limbing for 60 second r 40 seconds limbing for 60 second bing for 40 seconds limbing for 60 second es as time allows rates to measure impo- nbing ing 3 days a week. 1 1 day a week ays a week. 2 3 - 4 days a week	ds ds ds	warm	up to 80% ain 75 - 80%
Off-So Pre-So	Т 0 10 25 35 50 еазоо А Іг еазоо А Іг азооп А	ime - - - - - - - - - - - - - - - - - - -	10 25 35 50 60 raining bic Clin raining bic Clin raining bic Clin	Descripti Warm Up Cl Interval Spri Power Climb Active Reco Speed Climb Active Reco Lower Limb Active Reco repeat as ma Record peak Aerobic Clir Interval Spri Cool Down g Program nbing Program int Climbing Pr g Program	ion limbing int Clir bing fo very cl o Climb very cl o Climb very cl ny tim heart r nbing int Clir climbi	g mbing or 40 seconds limbing for 60 second r 40 seconds limbing for 60 second bing for 40 seconds limbing for 60 second es as time allows rates to measure impo- nbing ing 3 days a week. 1 1 day a week ays a week. 2 3 - 4 days a week	ds ds ds rovements	warm mainta cool d	up to 80% ain 75 - 80% own to 60%

Track (880 yd)

Activit	ty I)es	scrip	tion:						
	30			aerobic	65%	anaerobic/aero	obic		5%	pure aerobic
Recov	ery 90'			ds: tive recovery		10%	re	est periods		
Aerob	ic (Cli	mbir	ng Program	i (30 mi	inute progran	n):			
	Tin			Descrip					Target .	Heart Rate
	0 -		10	Warm Up (g				up to 80%
			25						mainta	
25	5 -		30	Cool Down	ı Climbi	ng			cool do	own to 60%
Interv		-	rint (n 1 (30 minute	e pr	ogram):	-	
	Tin		10	Descrip		_				Heart Rate
	0 -		10	Warm Up (-	-			warm u	up to 80%
10	0 -		23	Interval Sp		-				
						r 20 seconds limbing till hear	t rat	te reduces to S	200%	
					•	r 20 seconds	t I ai	le reduces to a	5070	
				-	•	limbing till hear	t rat	te reduces to §	20%	
						oing for 20 second			5070	
						limbing till hear		te reduces to 8	30%	
						nes as time allow			/ -	
				-	-	rates to measure		provements		
2	5 -		30	Cool Down				1	cool do	own to 60%
Inton	~16	·		^A limhina D		2 (60 minute		(mom)		
Interv	al S Tin		rint	Descrip		n 2 (60 minute	e pr	ogram):	Taraat	Heart Rate
(0 -		10	Warm Up (σ				up to 80%
	0 -		20	Interval Sp					warm	ip to 0070
1	0		20			r 30 seconds				
						limbing for 60 s	eco	nds		
						r 30 seconds		nas		
				-	-	limbing for 60 s	eco	nds		
						oing for 30 second		nas		
						limbing for 60 s		nds		
					-	es as time allow		nas		
						rates to measure		provements		
20	0 -		40	Aerobic Cl				provenients	mainta	in 75 - 80%
	0 -		50	Interval Sp	•	nbing			manna	11 / 2 00 / 0
	0 -		60	Cool Down					cool do	own to 60%
0.00.0		-				0				
Off-Sea				g Program	- 2	2 dava a waal				
						3 days a week. 1 1 day a weel	k			
Pre-Sea				g Program	iogram		N.			
110 500				mbing Program	m 2 da	avs a week.				
						2 - 3 - 4 days a	weel	k		
In-Seas					C	2				
				mbing Program						
	Inte	erv	al Spr	int Climbing I	Program	2 1 day a week	k or	Program 1 2	days a w	eek

Track (1 mile)

Activ	vity	De	scri	ption:						
	2	20%	a	naerobic	55%	anaerobic/ae	rot	pic	25%	pure aerobic
Reco	ver	v N	leth	ods:						
		0%		ctive recovery		10%	,	rest periods		
	1. • .				(20	•		-		
Aero		i Ch Time	mbi			inute progra	ım _.):	Tanaat	Hogat Data
		ime -	10	<i>Descrip</i> Warm Up (να				<i>Heart Rate</i> up to 80%
			25							in 80%
			30							own to 60%
						C			0001 40	5 WH to 0070
Inter		_	rint			n 1 (30 minut	te	program):	π.	
	0	ime	10	Descrip Worm Un (NG NG				Heart Rate
		_		Warm Up (Interval Spi		-			warm	up to 80%
	10	-	23			or 15 seconds				
						limbing till hea	art	rate reduces t	0.80%	
						or 15 seconds	arı	rate reduces t	0 00 /0	
						limbing till hea	art	rate reduces t	0.80%	
					•	bing for 15 sec			.0 0070	
						limbing till hea			o 80%	
						mes as time allo				
				-	-	rates to measur			S	
	25	-	30	Cool Down						own to 60%
T		C		Climbin a D			4			
Inter		5p 7ime	rint	Descrip		n 2 (60 minut	te	program):	Taraat	Heart Rate
	0		10	Warm Up (λα				up to 80%
	-	_		Interval Spi		-			warm	up to 8070
	10	_	20			or 5 seconds				
						limbing for 15	se	conds		
						or 5 seconds	30	conds		
						limbing for 15	SP	conds		
						bing for 5 second				
						limbing for 15				
					-	nes as time allo				
						rates to measur			c	
	20	-	40	Aerobic Cli			ine i	improvement		in 75 - 80%
		_	50	Interval Spi					mama	.m 75 - 0070
		_	60	Cool Down		•			cool de	own to 60%
	50		00	COOL DOWN		ing			0001 40	5 WH to 0070
Off-S				ng Program	-					
						3 days a week.	1			
Dro S				ng Program	rogram	1 1 day a we	ек			
rre-5				limbing Program	m 2 d	lave a week				
						2 - 3 - 4 days a	a w	eek		
In-Sea					105ruill	i uys i	a 11			
				s limbing Prograi	m 2 d	lays a week.				
						2 - 1 day a we	ek	or Program 1 -	- 2 days a w	veek

Track (cross country)

Activi	ity	De	script	tion:					
	5	%	ana	aerobic	15%	anaero	bic/aerobic	80%	pure aerobic
Recov	ver	y N	Ietho	ds:					
	9	0%	act	ive recovery		10%	rest periods		
Aerol	oic	Cli	mbin	g Program	(30 m	inute p	rogram):		
		ime		Descript			8		Target Heart Rate
	0	-	10	Warm Up C		g			warm up to 80%
1	0	-	25	Aerobic Cli	mbing				maintain 80%
2	25	-	30	Cool Down	Climbi	ing			cool down to 60%
Interv	val	Sp	rint (Climbing Pr	ogran	n 1 (30 I	minute prog	ram):	
		ime		Descript			- 0	· •	Target Heart Rate
	0		10	Warm Up C		-			warm up to 80%
1	0	-	25	Interval Spr					
				Power Clim					
							till heart rate r	reduces to 8	30%
				Speed Clim	•			1	
							till heart rate r	reduces to 8	30%
				Lower Lim				aduaas ta (200/
				Repeat as m			till heart rate r	educes to a	50%
							neasure impro	wements	
2	25	_	30	Cool Down			neasure impre	Jvenients	cool down to 60%
2			50	Cool Down	Chino	1115			coor down to 0070
Interv	val	Sp	rint (n 2 (60 i	minute prog	ram):	
		ime		Descript					Target Heart Rate
	0		10	Warm Up C		-			warm up to 80%
]	0	-	20	Interval Spr					
				Power Clim					
							for 15 seconds	5	
				Speed Clim					
							for 15 seconds	8	
				Lower Lim				-	
				repeat as ma			for 15 seconds	5	
							neasure impro	wements	
2	20	_	40	Aerobic Cli			neasure impre	Jvenients	maintain 75 - 80%
		_	50	Interval Spr	•	nhing			mamtam 75 - 0070
		-	60	Cool Down					cool down to 60%
c			00	2001 20 001	Chino				
Off-Se				g Program	2	.			
				mbing Program					
Pro-So				int Climbing P g Program	rogram	1 1 da	y a week		
110-50				mbing Program	n 2 da	avs a wee			
				int Climbing P					
In-Sea	son	Tra	ining	-	-		-		
				mbing Program					
	Ir	nterv	al Spri	int Climbing P	rogram	2 1 da	y a week or Pro	ogram 1 2	days a week

Activity De		(IIIaI	atilon)	
5%	anaerobic/aerobic	95%	pure aerobic	
570	anaerobic/aerobic	9570	pure aerobie	
Recovery M	Iethods:			
90%	active recovery	10%	rest periods	
Aerobic Cli	mbing Program (30 minute p	rooram	·)•	
Time	Description	rogram	L)•	Target Heart Rate
0 -	10 Warm Up Climbing			warm up to 80%
	25 Aerobic Climbing			maintain 80%
25 -				cool down to 60%
		•	,	
-	rint Climbing Program 1 (30	minute	program):	<i>т</i> и р
Time	Description			Target Heart Rate
0 -	10 Warm Up Climbing			warm up to 80%
10 -	25 Interval Sprint Climbing			
	Power Climbing for 15 sec		t moto moduloga to Q	200/
	Active Recovery climbing Speed Climbing for 15 seco		rate reduces to a	50%
	Active Recovery climbing		rate reduces to S	20%
	Lower Limb Climbing for			5070
	Active Recovery climbing			20%
	Repeat as many times as til			5070
	Record peak heart rates to			
25 -	30 Cool Down Climbing	measure	mprovements	cool down to 60%
-	rint Climbing Program 2 (60	minute	program):	<i>— и</i> р
Time	Description			Target Heart Rate
0 -	10 Warm Up Climbing			warm up to 80%
10 -	1 0	nda		
	Power Climbing for 5 seco		aanda	
	Active Recovery climbing Speed Climbing for 5 second		econus	
	Active Recovery climbing		aanda	
	Lower Limb Climbing for			
	Active Recovery climbing			
	repeat as many times as tin			
	Record peak heart rates to			
15 -		measure	mprovements	maintain 75 - 80%
45 -	e			mamam 75 0070
50 -	60 Cool Down Climbing			cool down to 60%
	raining Program			
	bic Climbing Program 2 - 3 days	a week		
	val Sprint Climbing Program 1 1		ek	
	raining Program			
	bic Climbing Program 2 days a w	veek.		
	val Sprint Climbing Program 2 3		a week	
In-Season Tr				
	bic Climbing Program 2 days a w			
Interv	val Sprint Climbing Program 2 1	day a we	ek	

Track (marathon)

		Triathl	on	
Activity Descript	tion:			
5% ana	aerobic/aerobic	95%	pure aerobic	
Recovery Metho		100/		
90% act	ive recovery	10%	rest periods	
Aerobic Climbin	g Program (30 minute	e program	ı):	
Time	Description			Target Heart Rate
0 - 10	Warm Up Climbing			warm up to 80%
10 - 25	Aerobic Climbing			maintain 80%
25 - 30	Cool Down Climbing			cool down to 60%
Interval Sprint (Climbing Program 1 (3	80 minuto	nrogram).	
Time	Description	o minute	program).	Target Heart Rate
0 - 10	Warm Up Climbing			warm up to 80%
10 - 25	Interval Sprint Climbing	r		warm up to oo /o
10 20	Power Climbing for 15 s			
	Active Recovery climbin		rate reduces to 8	30%
	Speed Climbing for 15 s			
	Active Recovery climbin		rate reduces to 8	30%
	Lower Limb Climbing f	÷		
	Active Recovery climbin			30%
	Repeat as many times as			
	Record peak heart rates			
25 - 30	Cool Down Climbing		•	cool down to 60%
Intorval Sprint (Climbing Program 2 (6	a minuto	program).	
Time	Description	o minute	program).	Target Heart Rate
0 - 10	Warm Up Climbing			warm up to 80%
10 - 25	Interval Sprint Climbing	г		warm up to 0070
10 20	Power Climbing for 15 s			
	Active Recovery climbin		econds	
	Speed Climbing for 15 s	÷		
	Active Recovery climbin		econds	
	Lower Limb Climbing for			
	Active Recovery climbin			
	repeat as many times as	•		
	Record peak heart rates			
25 - 45	Aerobic Climbing		1	maintain 75 - 80%
45 - 55		r		
55 - 60	Cool Down Climbing			cool down to 60%
Off C	- D			
Off-Season Trainin	imbing Program 2 - 3 da	wa a waak		
	rint Climbing Program 1		ak	
Pre-Season Trainin		1 day a we	UK	
	imbing Program 2 days	a week.		
	rint Climbing Program 2		a week	
In-Season Training		,		
	imbing Program 2 days	a week.		
	rint Climbing Program 2		ek or Program 1 -	2 days a week

53

Activity Description:	v			
90% anaerobic	10%	anaerobic/aerobic		
Recovery Methods:				
40% active recovery	60%	rest periods		
Aerobic Climbing Program (30 minute	program):			
Time Description		Target Heart Rate		
0 - 10 Warm Up Climbing		warm up to 80%		
10 - 25 Aerobic Climbing		maintain 80%		
25 - 30 Cool Down Climbing	5	cool down to 60%		
Interval Sprint Climbing Program 1 (3	0 minute prog	gram):		
Time Description		Target Heart Rate		
0 - 10 Warm Up Climbing		warm up to 80%		
10 - 25 Interval Sprint Climbi				
Power Climbing for 5		note reduces to 800/		
Active Recovery clim Upper Limb Climbing				
Active Recovery clim				
Speed Climbing for 5				
Active Recovery clim		ate reduces to 80%		
Lower Limb Climbing	g for 20 second	ls		
Active Recovery clim				
Repeat as many times				
Record peak heart rate	es to measure in	-		
25 - 30 Cool Down Climbing		cool down to 60%		
Interval Sprint Climbing Program 2 (6	0 minute prog			
Time Description		Target Heart Rate		
0 - 10 Warm Up Climbing 10 - 25 Interval Sprint Climbi	na	warm up to 80%		
Power Climbing for 5				
Active Recovery clim		conds		
Upper Limb Climbing				
Active Recovery clim		conds		
Speed Climbing for 5	seconds			
Active Recovery clim				
Lower Limb Climbing				
Active Recovery clim	-			
repeat as many times a Record peak heart rate				
25 - 35 Aerobic Climbing	es to measure n	maintain 75 - 80%		
35 - 50 Interval Sprint Climbi	ng	maintain 75 0070		
50 - 60 Cool Down Climbing		cool down to 60%		
Off-Season Training Program				
Aerobic Climbing Program 2 - 3 c	lays a week.			
Interval Sprint Climbing Program 1	1 day a week			
Pre-Season Training Program				
Aerobic Climbing Program 2 days				
Interval Sprint Climbing Program 2 - In-Season Training	3 - 4 days a v	меек		
Aerobic Climbing Program 2 days	s a week.			
Interval Sprint Climbing Program 2 -		a or Program 1 2 days a week		

Volleyball

Activity Descripti	0.71			
	aerobic	10%	anaerobic/aero	obic
Recovery Method 60% ac	s: tive recovery	40%	rest periods	
	-		lest periods	
Aerobic Climbing Time	Program (30 minute pro	gram):		Target Heart Pate
0 - 10	Description Warm Up Climbing			<i>Target Heart Rate</i> warm up to 80%
10 - 25	Aerobic Climbing			maintain 80%
25 - 30	Cool Down Climbing			cool down to 60%
Interval Sprint C	limbing Program 1 (30 mi	inute pro	gram):	
Time	Description	F	B) -	Target Heart Rate
0 - 10	Warm Up Climbing			warm up to 80%
10 - 25	Interval Sprint Climbing			
	Power Climbing for 10 se			
	Active Recovery climbin			80%
	Upper Limb Climbing for			000/
	Active Recovery climbin		t rate reduces to	80%
	Speed Climbing for 10 se		t rata raduana ta	Q00/
	Active Recovery climbin Lower Limb Climbing fo			80%
	Active Recovery climbin			80%
	Repeat as many times as			0070
	Record peak heart rates to			
25 - 30	Cool Down Climbing		r	cool down to 60%
Interval Sprint C	limbing Program 2 (30 mi	inute pro	gram):	
Time	Description	Pro-	B- ****)*	Target Heart Rate
0 - 10	Warm Up Climbing			warm up to 80%
10 - 25	Interval Sprint Climbing			
	Power Climbing for 10 se			
	Active Recovery climbin			
	Upper Limb Climbing for			
	Active Recovery climbin		econds	
	Speed Climbing for 10 se			
	Active Recovery climbin			
	Lower Limb Climbing fo			
	Active Recovery climbin	-		
	repeat as many times as the Record peak heart rates to			
25 - 30	Cool Down Climbing	Jineasure	mprovements	cool down to 60%
	Ũ			
Off-Season Train	mbing Program 2 - 3 days	a week		
	int Climbing Program 1 1			
Pre-Season Train		,		
Aerobic Cli	mbing Program 2 days a w			
	int Climbing Program 2 3	- 4 days a v	week	
In-Season Trainin		1		
	mbing Program 2 days a w int Climbing Program 2 1		-	
intervar spi	int Chinoing i Tograni 2 1	uay a week		

Wrestling

55

During the training programs, we use different terms to describe the training methods. Here is a definition of each term:

Aerobic Activities	Activities using large muscle groups at moderate intensities that permit the body to use oxygen to supply energy and to maintain a steady state for three or more minutes.
Aerobic Capacity	The ability to maintain a given aerobic power output.
Aerobic Climbing	Climbing at the user's target heart rate.
Aerobic Power	Power outputs supported by the oxidative system. This is usually measured as V02 max in laboratory tests.
Active Recovery	Exercising at an aerobic rate between intervals. During the active recovery period the user will allow their heart rate to drop back to their target heart rate.
Anaerobic Activities	Activities using muscles groups at high intensities that exceed the body's capacity to use oxygen to supply energy and which create an oxygen debt by using energy produced without oxygen.
Anaerobic Capacity Anaerobic Climbing	The ability to maintain a given anaerobic power output. In simple terms, a football player being able to explode off the line in the second half just like he did in the first half of the game. Climbing at a high intensity that exceeds the muscle's
U	capacity to use oxygen to produce energy.
Anaerobic Power	Power outputs supported by the ATP-CP system, fast glycolysis or the LA system or a combination of the two. Energy for the activity is obtained from mainly anaerobic pathways.
Cool Down Climbing	Climbing at a rate that is designed to reduce the user heart rate to the 40 to 60 percent on the user maximum heart rate. Usually done during the last 5 - 10 minutes of the program.
Interval Sprint Climbing	Prescribed exercise where after warm up climbing the athlete performs a series of anaerobic, power climbing, speed climbing, upper limb climbing, or lower limb climbing at maximal effort drills with active recovery or rest periods between each interval.

Lower Limb Climbing	During Interval Sprint Climbing, the athlete crouches down with the knees bent at approximately 90 % holding the stationary rails or handles (arms should be straight and parallel to the ground) and climbs anaerobicly legs only at maximum effort with 10 to 15 inch stroke lengths. The length of time will vary as prescribed. Always faster than the limbs are required to move in the specific sport.
Power	Force x Displacement/Time or simply Work/Time
Power Climbing	Performed during Interval Sprint Climbing, when the user performs long strokes with maximum intensity. The length of the strokes will be as long as possible push and pulling anaerobic without hitting the bottom stops. The length of time will vary as prescribed. Always faster than the limbs are required to move in the specific sport.
Recovery Time	The time required for the heart rate to return to the target heart rate after a high intensity sprint climbing interval.
Rest Period	A period of time where the user discontinues both anaerobic and/or aerobic activities during the sporting event.
Speed Climbing	During Interval Sprint Climbing when the user performs anaerobic, short, quick strokes (stroke lengths should be between 4 - 8 inches) with maximum intensity and speed. The stroke rate will be as quick as possible. The length of time will vary as prescribed.
Upper Limb Climbing	During Interval Sprint Climbing, the athlete steps off the of the machine, standing in front of the VersaClimber, grasps the two handles which allow the greatest range of motion and push and pull anaerobic with only the arms at maximum effort during the interval time. The athlete will step back onto the machine for active recovery. The length of time will vary as prescribed.
Warm Up Climbing	Climbing at a rate that is designed to increase the user heart rate to the target heart rate. Usually done during the first 15 minutes of the program.

Finally, we have developed recommended off-season, pre-season and in-season training programs. You may decide to change any of these programs, depending on the other conditioning programs you are utilizing.

