

CLIMBING ESCALADE CANADA

CONTINUOUS NATIONAL RANKING (CNR)

Framework for 2021-2024

A. OVERVIEW

The purpose of the Continuous National Ranking (CNR) is to provide a system for ranking senior athletes based on performances at multiple levels of domestic, continental and world competitions. The CNR calculation will remain consistent from season to season and is the base framework for athlete selections.

The CNR was created in an extensive collaboration/consultation with the following groups:

- Athlete Commission
- PTSO reps
- HP Committee
- Sport Partners (Own The Podium, Sport Canada)

CEC performed a detailed analysis of IFSC and Domestic Results over the 2016-2020 seasons. This historical data was used to understand and account for the factors that affect results at each level (strength of field, size of field and level of competition). The resulting CNR calculation includes these factors in order to best represent relative performance.

The CNR includes results from relevant National and International Level competitions. It is calculated on a rolling basis as new results become available and reflects performance over a period of 24 months. Results are converted to Ranking Points using the calculations detailed in section B. below

CNR points are available for the following events:

- Major Games
 - Olympic Games
 - Pan American Games
- IFSC Sanctioned Senior Events:
 - World Cups (WC)
 - World Championships (WCH)
- IFSC Sanctioned Youth Events:
 - Youth World Championships
- Continental Senior Events:
 - Pan American Championships – IFSC Pan American Council (PAC) sanctioned
 - Continental Cup Series – IFSC PAC sanctioned
- CEC sanctioned Domestic Senior Events:
 - CEC Nationals
 - HP Competitions (formerly Selection Camps)

A Continuous National Ranking will be calculated for each of the following disciplines:

1. Lead
2. Boulder
3. Speed
4. Combined (Lead/Boulder)

The CNR will be used for the following:

- Selection to HP Program
- Team Selections for IFSC and Continental Events

B. CALCULATION OF THE CONTINUOUS NATIONAL RANKING

LEAD, BOULDER, SPEED.

CNR Calculation

For Individual Disciplines, the CNR is the sum of an athletes' top 2 Event Point Values from the previous 24 months and considers the conditions outlined below:

1. EVENT LIMITS

- a. A maximum of 1 event from prior to the current competition season will be eligible.
 - i. Applies to each individual discipline and comp series (IFSC, Continental, Domestic).
 - ii. A season is considered current until at least 1 CNR scoring event in that event series and discipline has been held in a subsequent season (i.e., the current season for domestic Boulder is 2020 because CEC Nationals and HP Comp were held. The current season for domestic Lead and Speed is 2019 as no new CNR scoring events have been held subsequently).
- b. A maximum of 1 Continental Cup event will be eligible.

1. EXPIRATION OF POINTS

- a. Event points will be removed from the CNR on the 24-month anniversary of the event date with the following exceptions:
 - i. Domestic - event points will remain in the CNR beyond 24 months until such time as 2 eligible domestic events have been held in the current 24-month period.
 - ii. IFSC and Continental - event points will remain in the CNR beyond 24 months until such time as at least 1 eligible event of the same type, and to which CEC has sent a team, has been held in the current 24 month period.

Event Points Calculation

Event Points are calculated as follows:

Position Points X Strength of Field Factor (SToF) X Size of Field Factor (SZoF) = Event Points

Position Points

An athlete's result is converted to **Position Points** using the values in the Position Points Tables below.

Strength of Field (SToF) and Size of Field (SZoF)

The purpose of these 2 calculations is to adjust the weight of the position points according to how difficult it is to achieve the result.

Strength of Field Factor (SToF) considers the impact of how many highly ranked athletes are in the field.

Size of Field Factor (SZoF) considers the impact of the total number of competitors in the field.

When used together, SToF and SZoF ensure that the resulting EVENT POINTS are an accurate representation of the relative quality of a result.

For events that have more highly ranked competitors in the field, the SToF adds weight to the position points. For events that have fewer highly ranked competitors in the field, SToF subtracts weight from the position points.

For events that have more than the average number of athletes in the field, SZoF adds weight to the position points.

For events that have fewer than the average number of athletes in the field, SZoF subtracts weight from the position points.

Strength of Field Factor (SToF)

The Strength of the Field Factor for an event is determined by the number of highly ranked athletes in the field from the relevant rankings for the given event type (see table below).

Event Type	Condition	Thresholds	SOF Factor
IFSC Senior Events (World Championships and World Cups)	For first 3 events of season: number of athletes from IFSC World Ranking Top 40 from previous year. For subsequent events of season: number of athletes from IFSC WR Top 40 after first three events.	30 or more	= 1.1
		20-29	= 1.0
		0-19	= 0.9
Youth World Championships (Youth A and Junior Categories)	Number of athletes in field from IFSC World Ranking Top 40 of current season (first three events)	3 or more	= 1.1
		1-2	= 1.0
		0	= 0.9
(Youth B Categories)	Fixed SToF Factor		= 1.0
Continental Senior Events (Pan Am and Continental Cup Series)	Number of athletes in field from Top 15 of IFSC PAC Continental Ranking	10 or more	= 1.1
		6-9	= 1.0
		0-5	= 0.9
Domestic Senior HP Events (HP Competitions and CEC Nationals)	Number of athletes in field from Top 4 of CEC Continuous National Ranking	3 or more	= 1.1
		1-2	= 1.0
		0	= 0.9

Size of Field Factor (SZoF)

The Size of Field Factor is determined by the variation in the size of an event field relative to the normalized average field size for the season. It is calculated as shown below:

$$\text{SZoF} = ((\text{event field minus normalized average field})/2)/80 + 1$$

The normalized average field size is updated annually based on the IFSC's prior year's data.

SZoF is only applied to IFSC World Championship and IFSC World Cup events as these have a large variance in field size.

Here are examples of SZoF factors:

Size of Field	SZoF
30	0.69
40	0.75
60	0.88
80	1.0
100	1.13

Positive vs Negative SZoF.

Positive Size of Field Factor (greater than 1) will be applied to all positions.

Negative Size of Field Factor (less than 1) will be applied to positions below semi-final only (those who do not make semi final or round of 16).

Table 1 – Position Points

Domestic Events					
HP Competitions			CEC Nationals		
result	Position Points		result	Position Points	
	L&B	S		L&B	S
1	35.0	35.0	1	33.0	33.0
2	34.0	34.0	2	31.7	31.7
3	32.4	32.4	3	29.8	29.8
4	30.5	30.5	4	27.4	27.4
5	28.2	28.2	5	24.7	24.7
6	25.7	25.7	6	21.7	21.7
7	23.0	14.0	7	18.7	11.0
8	20.2	14.0	8	15.7	11.0
9	17.5	6.0	9	12.9	5.0
10	13.5	6.0	10	10.3	5.0
11-20	6.0	6.0	11-20	5.0	5.0

Youth World Events			
IFSC Youth World Championships			
Result	Position Points		
	BOULDER	LEAD	SPEED
1	52.0	52.0	52.0
2	51.0	51.0	51.0
3	50.0	50.0	50.0
4-6	46.0	46.0	46.0
7-8	44.0	46.0	46.0
9-16	31.0	31.0	31.0
17 - end semis	18.0	18.0	18.0

For Senior Continental Events, Position Points are only available for the top 60% of the field.

Field Size is taken from official results on the IFSC PAC or USAC website.

Senior Continental Events													
PanAm Championships							Continental Cups						
Result	Position Points			Result	Position Points		Result	Position Points			Result	Position Points	
	BOULDER	LEAD	SPEED		BOULDER	LEAD		BOULDER	LEAD	SPEED		BOULDER	LEAD
1	60.0	60.0	60.0	27	12.4	12.4	1	50.0	50.0	50.0	27	11.2	11.2
2	58.0	58.0	58.0	28	11.7	11.7	2	48.0	48.0	48.0	28	10.2	10.2
3	56.0	56.0	56.0	29	11.0	11.0	3	46.0	46.0	46.0	29	9.2	9.2
4-6	47.0	47.0	47.0	30	10.4	10.4	4-6	43.0	43.0	43.0	30	8.3	8.3
7-8	45.0	47.0	47.0	31	9.7	9.7	7-8	41.0	43.0	43.0	31	7.5	7.5
9-16	32.0	32.0	32.0	32	9.1	9.1	9-16	30.0	30.0	30.0	32	6.7	6.7
17	20.0	20.0		33	8.5	8.5	17	22.0	22.0		33	6.0	6.0
18	20.0	20.0		34	7.9	7.9	18	22.0	22.0		34	5.3	5.3
19	20.0	20.0		35	7.4	7.4	19	22.0	22.0		35	4.7	4.7
20	20.0	20.0		36	6.8	6.8	20	22.0	22.0		36	4.1	4.1
21	16.8	20.0		37	6.3	6.3	21	18.6	22.0		37	3.6	3.6
22	16.1	20.0		38	5.9	5.9	22	17.2	22.0		38	3.2	3.2
23	15.3	20.0		39	5.4	5.4	23	15.9	22.0		39	2.8	2.8
24	14.6	20.0		40	5.0	5.0	24	14.7	22.0		40	2.4	2.4
25	13.9	20.0					25	13.5	22.0				
26	13.1	20.0					26	12.3	22.0				

For Senior IFSC Events, Position Points are only available for the top 75% of the field. Field Size is taken from official results on the IFSC website.

Senior World Events															
IFSC World Championships						IFSC World Cup									
Result	Position Points			Result	Position Points			Result	Position Points			Result	Position Points		
	BOULDER	LEAD	SPEED		BOULDER	LEAD	SPEED		BOULDER	LEAD	SPEED		BOULDER	LEAD	SPEED
1	95.0	95.0	95.0	41	39.6	1	92.0	92.0	92.0	41	38.3				
2	92.0	92.0	92.0	42	38.1	2	90.0	90.0	90.0	42	36.9				
3	90.0	90.0	90.0	43	36.7	3	87.0	87.0	87.0	43	35.5				
4-6	85.0	85.0	85.0	44	35.3	4-6	83.0	83.0	83.0	44	34.2				
7-8	82.0	85.0	85.0	45	33.9	7-8	80.0	83.0	83.0	45	32.8				
9-16	78.0	78.0	78.0	46	32.5	9-16	75.0	75.0	75.0	46	31.5				
17	72.0	72.0	74.2	47	31.2	17	70.0	70.0	71.8	47	30.2				
18	72.0	72.0	73.0	48	29.7	18	70.0	70.0	70.7	48	28.7				
19	72.0	72.0	71.8	49	28.2	19	70.0	70.0	69.5	49	27.3				
20	72.0	72.0	70.5	50	26.8	20	70.0	70.0	68.3	50	26.0				
21	69.2	72.0	69.2	51	25.4	21	67.0	70.0	67.0	51	24.6				
22	67.9	72.0	67.9	52	24.1	22	65.7	70.0	65.7	52	23.4				
23	66.5	72.0	66.5	53	22.8	23	64.4	70.0	64.4	53	22.1				
24	65.1	72.0	65.1	54	21.6	24	63.1	70.0	63.1	54	20.9				
25	63.7	72.0	63.7	55	20.4	25	61.7	70.0	61.7	55	19.8				
26	62.3	72.0	62.3	56	19.3	26	60.3	70.0	60.3	56	18.7				
27	60.8			57	18.2	27	58.9			57	17.6				
28	59.3			58	17.1	28	57.4			58	16.6				
29	57.8			59	16.1	29	56.0			59	15.6				
30	56.3			60	15.1	30	54.5			60	14.7				
31	54.7			61	14.2	31	53.0			61	13.8				
32	53.2			62	13.3	32	51.5			62	12.9				
33	51.7			63	12.5	33	50.0			63	12.1				
34	50.1			64	11.7	34	48.6			64	11.3				
35	48.6			65	10.9	35	47.1			65	10.6				
36	47.1			66	10.2	36	45.6			66	9.9				
37	45.5			67	9.5	37	44.1			67	9.2				
38	44.0			68	8.9	38	42.6			68	8.6				
39	42.5			69	8.3	39	41.2			69	8.0				
40	41.0			70	7.7	40	39.7			70	7.5				
				71	6.0					71	5.0				

Major Games			
Olympics		PanAm Games	
Result	Position Points	Result	Position Points
1	100.0	1	70.0
2	95.0	2	45.0
3	92.0	3	40.0
4-8	70.0	4-8	30.0
participant	50.0	participant	25.0

Because of format change the Olympic position points for Paris will change. These changes will be published prior to 2023 IFSC season.

Example CNR Calculations:

Example #1

Event: **IFSC World Cup (B)** Number of Athletes in Field from WR Top 40: **25 = SToF (1.0)**

Field Size: **89** **SZoF = 1.06**

Final Result: **32nd** Fixed Percentage of Final Positions: **75% = points awarded to positions 1-57**

Calculation: Position Points (51.5) x SToF (1.0) x SZoF (1.06) = Event Points (54.6)

Example #2

Event: **IFSC World Cup (L)** Number of Athletes in Field from WR Top 40: **19 = SToF (0.9)**

Field Size: **88** **SZoF = 1.05**

Final Result: **27th** Fixed Percentage of Final Positions: **75% = points awarded to positions 1-66**

Calculation: Position Points (58.9) x SToF (0.9) x SZoF (1.05) = Event Points (55.7)

Example #3

Event: **IFSC World Championships (B)** Number of Athletes in Field from WR Top 40: **32 = SToF (1.1)**

Field Size: **68** **SZoF = 0.93**

Final Result: **57th** Fixed Percentage of Final Positions: **75% = points awarded to positions 1-51**

In this example, no points are assigned to this result because of the fixed percentage of final positions.

Example #4

Event: **IFSC World Cup (L)** Number of Athletes in Field from WR Top 40: **30 = SToF (1.1)**

Field Size: **50** **SZoF = 0.93**

Final Result: **19th** Fixed Percentage of Final Positions: **75% = points awarded to positions 1-38**

Calculation: Position Points (70) x SToF (1.1) = Event Points (77)

In this example, SZoF is not applied to the final result because it is less than 1.0. SZoF less than 1.0 is only applied to positions outside semi-finals.

Example #5

Event: **CEC Nationals (L)** Number of Athletes in Field from CNR Top 4: **3 = SToF (1.1)** Field Size: **42**

Final Position: **19** Fixed Percentage of Final Positions: **to position #20**

Position Points (2.0) x SToF of 1.1 = Event Points (2.2)

COMBINED

1. Because of the change to the Olympic Combined Format following Tokyo there are several outstanding unknowns about format, scoring and frequency of Combined only events. The Combined CNR will only be used to select athletes for the High Performance Program (HPP) until such time as Combined Events are held regularly.
2. The CNR for Lead/Boulder Combined for 2021 will be calculated as follows:

Sum of CNR points for Lead plus Boulder divided by 2

$$(CNR L+CNR B)/2$$

3. The CNR Calculation for Combined will be updated as we receive more information from the IFSC regarding scoring, format and frequency of combined events.