



# EXO Race



## POWERED EXOSKELETON RACE

In this race, pilots with complete thoracic or lumbar spinal cord injury can compete using an exoskeleton. This wearable, powered support enables them to walk and master other everyday tasks.

## CHALLENGES FOR 2020

In the Powered Exoskeleton Race the pilots now also have to do activities with their hands. The stacking of cups while standing at a table requires the pilots to have their hands free and maintain balance while managing their crutches. The Rough Terrain also offers a new challenge in so far as the pilots can't place their feet flat on the ground in one part of the obstacle.

**Time Limit**  
10 minutes



Task Name	Sit & Stand	Slalom	Rough Terrain	Stairs	Tilted Path	Ramp & Door
<b>Points (Total: 100)</b>	15	14	16	20	18	17
<b>Task Description</b>	Sit down and stand up from sofa once; stack cups while standing next to a table	Walk through between each pair of furniture without displacing them	Cross uneven terrain	Climb and descend stairs once; each step must be stepped on with at least one foot	Walk across tilted path in competition direction	Climb the ramp; open and close the door; descend the ramp on the other side
<b>Challenge</b>	Range of motion and strength in the knee and hip joints; stability	Precision of steps; agility	Adapting step lengths and widths; precision of steps	Range of motion and strength in the knee and hip joints; step precision	Lateral range of motion in hip and foot joints; stability	Range of motion in foot, knee and hip joints; stability; maneuvering in confined spaces
<b>Scoring</b>	1. Whoever achieves the highest score by solving the tasks is the race winner. 2. In case of a tied score between two or more pilots, the pilot with the lowest total time is the race winner.			<b>Main Competition Rules</b> The pilot may skip tasks, but cannot return to them later.		