

PHYSICAL ABILITY GUIDELINES

1. Credential applicants should be physically able to perform assigned shipboard functions and meet the physical demands that would reasonably arise during an emergency response. As used in this context, an “*emergency response*” refers to emergency evolutions such as abandon ship and firefighting, and the basic procedures to be followed by each mariner.
2. If the examining medical practitioner doubts the applicant’s ability to meet the guidelines contained within this table, and for all applicants with a Body Mass Index (BMI) of 40.0 or higher, the practitioner shall require that the applicant demonstrate the ability to meet the guidelines. This does not mean, for example, that the applicant must actually don an exposure suit, pull an uncharged 1.5 inch diameter 50’ fire hose with nozzle to full extension, or lift a charged 1.5 inch diameter fire hose to fire fighting position. Rather, the medical practitioner may utilize alternative measures to satisfy himself or herself that the applicant possesses the ability to meet the guidelines in the third column. A description of the methods utilized by the medical practitioner should be reported on the CG-719K or CG-719K/E (or approved equivalent form) as appropriate. All demonstrations of ability should be performed by the applicant without assistance. Any prosthesis normally worn by the applicant and other aid devices such as prescription glasses may be used by the applicant in all practical demonstrations except when the use of such would prevent the proper wearing of mandated personal protective equipment (PPE).
- a. Those applicants where only a physical demonstration of abilities is required (719-K/E) may substitute a physical exam (719-K) . Enclosure (1) details the relevant standards applicable to each type of credential.
- b. The BMI calculation is discussed on the Centers for Disease Control and Prevention website:
http://www.cdc.gov/nccdphp/dnpa/bmi/adult_BMI/about_adult_BMI.htm
3. The Coast Guard recognizes that the guidelines contained in this table refer to shipboard conditions and tasks that may not be applicable to all vessels, e.g. a crewmember on a 79-foot towing or small passenger vessel may not be required to carry a 1.5 inch diameter fire hose with nozzle 50 feet; however, for the most part, credentials issued by the Coast Guard are not vessel specific, and they provide authority to work on different types and sizes of vessels, with each vessel having its own equipment and operating conditions. An applicant (along with his or her employer, as appropriate) who is unable to meet any of the guidelines contained within this table may propose alternatives that reflect the conditions applicable to his or her operating environment. Such proposals should be made in writing to the NMC, which will give full consideration to each proposal on an individual, case-by-case basis. See paragraph 10 of enclosure (6).

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4. If an applicant is unable to meet any of the guidelines contained within this table, the examining medical practitioner should provide information on the degree or severity of the applicant's inability to meet the guidelines. Applicants with physical limitations who do not meet the related physical ability guidelines in this table may be issued a credential with appropriate limitations upon evaluation by the Coast Guard. Mariners and marine employers are responsible for restricting the mariner's duties to the limitations of the credential.
 - a. Any prosthesis or similar device used to successfully meet the physical standards should be noted on the credential(s), along with a requirement that the individual must use the prosthesis or similar device while acting under the authority of the credential(s).

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SHIPBOARD TASKS, FUNCTION, EVENT OR CONDITION:	RELATED PHYSICAL ABILITY:	THE EXAMINER SHOULD BE SATISFIED THAT THE APPLICANT:
Routine movement on slippery, uneven and unstable surfaces.	Maintain balance (equilibrium).	Has no disturbance in sense of balance.
Routine access between levels.	Climb up and down vertical ladders and stairways.	Is able, without assistance, to climb up and down vertical ladders and stairways.
Routine movement between spaces and compartments.	Step over high door sills and coamings, and move through restricted accesses.	Is able, without assistance, to step over a door sill or coaming of 24 inches (61 centimeters) in height. Able to move through a restricted opening of 24 inches by 24 inches (61 centimeters by 61 centimeters).
Open and close watertight doors, hand cranking systems, open/close valve wheels.	Manipulate mechanical devices using manual and digital dexterity, and strength.	Is able, without assistance, to open and close watertight doors that may weigh up to 55 pounds (25 kilograms). Should be able to move hands/arms to open and close valve wheels in vertical and horizontal directions; rotate wrists to turn handles. Reach above shoulder height.

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SHIPBOARD TASKS, FUNCTION, EVENT OR CONDITION:	RELATED PHYSICAL ABILITY:	THE EXAMINER SHOULD BE SATISFIED THAT THE APPLICANT:
Handle ship's stores.	Lift, pull, push and carry a load.	Is able, without assistance, to lift at least a 40 pound (18.1 kilogram) load off the ground, and to carry, push or pull the same load.
General vessel maintenance.	Crouch (lowering height by bending knees); kneel (placing knees on ground); and stoop (lowering height by bending at the waist). Use hand tools such as spanners, valve wrenches, hammers, screwdrivers, pliers.	Is able, without assistance, to grasp, lift and manipulate various common shipboard tools.
Emergency response procedures, including escape from smoke-filled spaces.	Crawl (the ability to move the body with hands and knees); feel (the ability to handle or touch to examine or determine differences in texture and temperature).	Is able, without assistance, to crouch, kneel and crawl, and to distinguish differences in texture and temperature by feel.
Stand a routine watch.	Stand a routine watch.	Is able, without assistance, to intermittently stand on feet for up to four hours with minimal rest periods.
React to visual alarms and instructions, emergency response procedures.	Distinguish an object or shape at a certain distance.	Fulfills the eyesight standards for the merchant mariner credential(s) applied for. <i>See footnote 1 of this table & enclosure (5) of this NVIC.</i>

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SHIPBOARD TASKS, FUNCTION, EVENT OR CONDITION:	RELATED PHYSICAL ABILITY:	THE EXAMINER SHOULD BE SATISFIED THAT THE APPLICANT:
React to audible alarms and instructions, emergency response procedures.	Hear a specified decibel (dB) sound at a specified frequency.	Fulfills the hearing capacity standards for the merchant mariner credential(s) applied for. <i>See footnote 1 of this table & enclosure (5) of this NVIC.</i>
Make verbal reports or call attention to suspicious or emergency conditions.	Describe immediate surroundings and activities, and pronounce words clearly.	Is capable of normal conversation.
Participate in firefighting activities.	Be able to carry and handle fire hoses and fire extinguishers.	Is able, without assistance, to pull an uncharged 1.5 inch diameter, 50' fire hose with nozzle to full extension, and to lift a charged 1.5 inch diameter fire hose to fire fighting position.
Abandon ship.	Use survival equipment.	Has the agility, strength and range of motion to put on a personal flotation device and exposure suit without assistance from another individual.

¹ The vision and hearing standards listed in enclosure (5) are not applicable to entry level ratings, nor to cadet, student observer, apprentice engineer or apprentice mate ratings. As discussed in enclosure (1), examining medical practitioners should use form CG-719K/E to document their examination of applicants for these ratings. Examining medical practitioners should note any concerns with the eyesight and/or hearing capacity of applicants for these ratings on the CG-719K/E so that the Coast Guard can make an appropriate determination as to the fitness of the individual for the rating(s). Examining medical practitioners may attach additional sheets to the CG-719K/E for this purpose.