

SOLAR ENERGY CORPORATION OF INDIA LIMITED

NORMS AND STANDARDS FOR MEDICAL FITNESS

A) AIM:

The aim of these standards is to select, for a particular post, a person who must be in good physical and mental health and must be free from any physical defect or disability that is likely to interfere with efficient performance of the duties and / or safety of the plants, machinery or co-workers.

B) SCOPE:

Any person seeking appointment in the Solar Energy Corporation of India Ltd. whether in a permanent, temporary, fixed tenure basis, apprentice, etc shall be required to undergo medical examination.

The Pre-employment medical examination shall be a part of the selection procedure of a candidate for every post/position.

As per extant rules, these norms will not be applicable in respect of internal candidate of the Company or the candidate who comes from Central / State Governments of Public Sector Undertakings.

C) PROCEDURE FOR MEDICAL EXAMINATION:

- The Authority issuing the offer of appointment / engagement shall attach the format prescribed for undertaking the medical examination.
- Medical Examination as prescribed under these guidelines will be conducted by Authorized Medical Officer (not below the rank of Assistant Civil Surgeon) of Govt Hospital / Designated Nominated Hospitals, who shall be the Competent Authority to certify a candidate as Medically Fit / Unfit / Temporarily Unfit. However, SECI reserves the right to re-examine or review a medical report.
- Signature /fingerprint impressions: Examining doctor should get signature or the impressions of all the fingers of the left hand on the space provided for the same.
- Candidate offered appointment/engagement shall be required to paste his/her recent passport size photograph in the space provided in the format at the time of undergoing medical examination. The photograph shall be mandatorily signed and stamped by the examining Doctor.
- Where no facilities are available for conducting certain medical examination/tests, the candidate will be referred to competent medical practitioners/specialists /laboratories/ nominated / empaneled hospitals, which will be at the discretion of the examining medical authority / Head of HR.
- Authorized Medical Officer will complete the pre-employment medical examination fitness certificate as given in the Pre-Employment Examination Part-II declaring the candidate fit or unfit or temporarily unfit, as the case may be. The certificate will be signed by the examining

doctor/ Authorized Medical Officer. The HR department will retain the medical report for Occupational Health Records.

- Where a candidate is found to be temporarily unfit by reason of short-term sickness which is curable within a period of not more than eight weeks, the candidate will be informed by HR department for re-examination on advice from examining doctor/ Authorized Medical Officer. The examining doctor, on satisfying himself during re-examination that the short-term disease is cured, will declare the candidate to be medically Fit. Where a candidate is found to be temporarily unfit by reason of short term sickness which is curable within a period of not more than 3 months [excluding pregnancy, tuberculosis and leprosy (Hansen's Disease) cases], the candidate will be informed by Medical department for re-examination in the prescribed form. The reasons for being declared temporarily unfit shall be recorded by Medical Department in Pre- Employment Examination in the formal prescribed. The examining Medical Officer may advise the candidate to appear for re-examination after a specific period (not exceeding 3 months, except pregnancy, tuberculosis and leprosy cases) depending on the nature of ailment. Upon re-examination, the examining doctor, on satisfying himself that the short-term reason for unfitness is rectified. will declare the candidate to be medically Fit. Upon re-examination, if a candidate is still found to be medically un-fit, the examining Medical Officer may advise a new date (not exceeding maximum 3 months from the date of first examination) for reexamination

D) Norms and Standards for Physical fitness

1. Good mental and bodily health and a strong constitution
2. Free from physical defect or abnormality-congenital or acquired, likely to interfere with the efficient performance of duties
3. No evidence of maldevelopment-physical or mental
4. Joints and locomotor functions are within normal limits.
5. No deformity from old fractures or depressions of skull bones.

6. HEIGHT AND WEIGHT

- 6.1. Height: Measurement will be taken in centimeters with the individual standing bare footed and straight weight thrown on both heels kept together. Tendency to stand on toes or raise heels will be strictly avoided. The candidate will stand erect with chin drawn in to bring the vertex of the head in level under the horizontal bar of the stand and clavicles, buttocks and shoulders touching the vertical portion of the stand with body fully relaxed and spine straight but not strained.
- 6.2. The table of standard weight for various groups is given below. Candidate not meeting the standard as given in the table below may be declared temporarily unfit for a maximum period of 21 days by Authorized Medical Officer and shall be declared fit only in case the candidate fulfills the criteria including the norms for Body Mass Index.

Height - Weight Table for Males

Height (cm)	Weight in Kg at different ages
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	20-24 years	25-29 years	30-34 years
152.5	48	49	50
155.0	49	50	51
157.5	50	51	52
160.0	51	52	53
162.5	52	53	54
165.0	53	54	56
167.0	54	56	58
170.0	56	58	60
172.5	58	60	62
175.0	60	62	64
177.0	62	64	66
180.0	64	66	68
183.0	66	68	70

6.3. Add 2 Kg in weight for every additional 3 cm in height

6.4. For females, the general state of physical development will be taken into account and body weight recorded in each case.

6.5. The minimum height required for Drivers is 162 cm.

7. BODY MASS INDEX: In case the weight of an individual is found more than prescribed as per the height - weight table as indicated above then Body Mass Index (BMI) will be taken as deciding parameter as per the norms given below:

7.1. Age up to 35 years –BMI should be maximum of 30 Kg / m².

7.2. Age above 35 years BMI should be maximum of 32 Kg / m².

8. CHEST :

Acceptable chest measurement at full expiration will be 79 cm (relaxable by 5 cm) minimum expansion 5 cm. The range of expansion upto 4 cm. i.e. a deviation of 20% will be acceptable. This is not applicable to female candidates.

Measurement: The candidate will stand with feet together and arms raised over the head. The tape will be taken round the chest horizontally with its upper edge touching interior angles of the shoulder blades. The arms will then be lowered to hang relaxed by the side of the body. The candidate will not be permitted to throw shoulders upwards or backwards so as to displace the tape. The candidate will be directed to take deep breath several times without causing contraction of chest muscles or wing out the shoulder blades. The maximum and minimum expansion of the Chest will then be recorded in centimeters thus 70-75, 78-84 etc. Fraction of cm below 0.5 will be ignored and over 0.5 taken as one.

9. EYE:

Standards and procedures of examination in respect of visual acuity and colour perception are as follows.

9.1. The candidate's eyes will be tested and results of the test recorded in accordance with the following rules.

9.2. **General:**

The candidate's eyes will be submitted to a general examination directed to the detection of any disease or abnormality. The candidate may be rejected if he suffers from morbid condition of eyes, eye-lids or contiguous structures of such a nature as would render him/her unfit for service at the time of appointment or at a future date.

9.3. **Visual Acuity:**

9.3.1. The examination for determining the acuity of vision includes two tests, one for distant, the other for near vision. Each will be examined separately.

9.3.2. Standard of visual acuity for personnel of various categories, with or without glasses will be as follows:

Categories of Employees	Age	Distant Vision		Near Vision	
		Better eye	Worse eye	Better eye	Worse eye
For Employees in technical departments	Below 35 yrs. of age	6/9	6/9	Sn. 0.6	Sn. 0.6
		6/6	6/12	--	--
	35 yrs. of age and above	6/12	6/12	Sn. 0.8	Sn. 0.8
		6/9	6/18	--	--
For Employees in non- technical departments	Below 35 yrs. of age	6/9	6/12	Sn. 0.8	Sn. 0.6
		6/6	6/18	--	--
		6/18	6/18	--	--
	35 yrs. of age and above	6/12	6/24	Sn. 0.8	Sn. 0.8
		6/12	6/18	--	--
		6/24	6/24	--	--
		6/18	6/36	--	--

9.4. **Fundus Examination:**

9.4.1. In every case of Myopia, fundus examination should be carried out and the results recorded. In the event of a pathological condition being present which is likely to be progressive and affect efficiency of the candidate he/she should be declared unfit.

9.4.2. The total amount of myopia (including the cylinder) shall not exceed - 6.00 D. The total amount of hyper metropia (including the cylinder) shall not exceed + 6.00D. in each eye

9.4.3. Fundus and media should be healthy and within normal limits.

9.4.4. No degenerative signs of vitreous or chorioretinitis to be present, suggesting progressive myopia.

9.4.5. Should have good binocular vision, fusion faculty and full field of vision in both the eyes.

9.4.6. There should be no organic disease likely to cause exacerbations or deterioration.

9.5. **Colour vision:**

The testing of colour vision shall be essential for all candidates. Colour vision shall be tested with Ishihara's Isochromatic plates in good light.

- 9.6. Field of vision: The field of vision shall be tested by the confrontation method. Where such test gives unsatisfactory or doubtful results, the field of vision should be determined on the visual field screener/perimeter.
- 9.7. Ocular conditions other than visual acuity.
- 9.8. **Colour Blindness:**
- 9.8.1. Permissible : This will not be a disqualification for employment in purchase, sales accounts, ministerial (clerical and Store Keepers, apprentices covered by Apprentices Act and any other category wherein defective colour vision is not likely to interfere with his work or create risk for others working with him.
- 9.8.2. Not permissible:
Colour blindness is a disqualification for the following:
- a. Industrial staff dealing with machines involving recognition of colored signals
 - b. Technicians engaged in Laboratory work and chemists, crane operators, etc
 - c. Draughtsmen
 - d. Electricians
 - e. Drivers of all categories
 - f. Security Personnel
 - g. Doctors
 - h. Executive Trainees (Engineering)
 - i. Engineering equipment erection and O&M.
 - j. Other occupations where perception of colour is considered essential in view of the nature of duties of the offered post and future posts likely to be occupied by the candidate either on appointment on promotion or on job rotation / transfer.
- 9.8.3. Whenever an employee suffering from colour blindness is posted or transferred into a category wherein colour perception is required his eyes will be re-examined for the same along with the examination for visual acuity.
- 9.9. **Night Blindness :**
The medical officer will have the discretion to improvise such test e.g. recording of visual acuity with reduced illumination or by making the candidate recognise various objects in a dark room after he/she has been there for 20 to 30 minutes. Candidate's own statements should not always be relied upon, but they should be given due consideration
- 9.10. Any organic disease or a progressive refractive error which is likely to result in lowering of the visual acuity shall be considered as disqualification.
- 9.11. **Trachoma:**
Trachoma, unless complicated shall not ordinarily be a cause for disqualification.
- 9.12. **Squint:**
For technical services skilled jobs, where the presence of binocular vision is essential, squint, even if the visual acuity is of the prescribed standards should be considered as disqualification. For other services, the presence of squint should not be considered as a disqualification if the visual acuity of each eye is of the prescribed standard.

9.13. One eyed person : For regular service one eyed individual shall be considered as unfit except for ministerial and allied jobs where binocular vision is not considered essential. It will be ensured that the prognosis or the functioning eye is good and its vision is not likely to be endangered by the condition of the worse eye and the prescribed visual acuity standards are fully satisfied.

9.14. Contact Lenses: Correction with contact lenses is no bar for employment provided the prescribed standards are fulfilled.

10. EAR:

A candidate should be free from any active disease of the ear. The candidate should be able to hear whispering voice separately in both the ears at a distance of 2 feet in a quiet room. A candidate who fails in this test will be declared medically unfit.

Procedure for hearing test : The examining medical officer will test the hearing standards of a candidate in a quiet room using Audiometric screening.

11. NOSE : A candidate should be free from any active disease of nose.

12. THROAT:

State of tonsils-Slight hypertrophy without evidence of repeated tonsillitis is not a cause for rejection. Enlarged tonsils cause temporary unfitness until treated with tonsillectomy. Throat, palate, gums, jaws, temporo-mandibular joint and dentitions should be within normal limits.

13. BLOOD-PRESSURE (BP): The normal limits of blood pressure, without involvement of target organ, shall be assessed as follows:

Age Group	Systolic	Diastolic
Upto 35 years of age	Not exceeding 140	90 mm or below
Beyond 35 years of age	Not exceeding 150	100 mm or below

14. ECG:

If resting ECG is abnormal then the individual shall be submitted for exercise tolerance test (TMT) and if TMT is positive the individual will be declared unfit.

15. GENITO URINARY SYSTEM, ETC:

15.1. Testicles: Individuals detected to be having undescended testicles on one or both sides shall be declared temporarily unfit for maximum period of 21 days. Fitness can only be granted if the candidate reports back with orchidectomy with negative biopsy report for malignance, with 21 days of medical examination.

15.2. Candidates with Hydrocele, piles, varicocele and hernia shall be declared temporarily unfit for a maximum period of 21 days during which period candidate will have to undergo definitive treatment.

16. GLANDS :

Thyroid should be normal with no evidence of hypo or hyperthyroidism or generalised enlargement of lymphglands. Scars, if any, of the previous removal of tubercular glands should be normal and there must not have been any active disease in the last five year.

17. URINE : Non orthostalic albunimuria will be a cause for rejection.

18. BLOOD SUGAR :

18.1. All candidates with type-1 diabetes will be declared unfit irrespective of age.

18.2. Up to 35 years of age all the individuals detected to be having diabetes will be declared unfit.

18.3. Individual above 35 years of age detected to be having type-II diabetes, without organ involvement, shall be declared temporarily unfit for maximum period of 21 days during which their blood sugar has to be within normal limit otherwise they will be declared unfit.

18.4. All diabetics with any of target organ involvement shall be made unfit irrespective of age.

19. RADIOLOGICAL EXAMINATION:

Skiagram chest of all fresh entrants will be taken. Mass miniature radiography will be utilised in lieu, whenever available. Cases diagnosed as suffering from pulmonary tuberculosis will be declared unfit. Such candidates are considered to be unsuitable for employment in view of the industrial hazards.

20. VENEREAL DISEASE :

Candidates who are suffering from venereal disease will not be declared fit unless detailed examination of urethro smear and serological test proves negative.

21. PREGNANCY :

If at the time of medical examination, a candidate is pregnant of 12 weeks or more, she shall be declared temporarily unfit until she has completed six week after confinement.

22. SKIN DISEASE :

Candidate suffering from leprosy or chronic and inveterate skin conditions will be declared unfit. Vitiligo cases are acceptable.

23. FITS :

Candidates suffering from epilepsy will be declared unfit. Those suffering from epileptic attacks are dangerous in certain occupations like Drivers, Crane Operators, Mechanists, Fire brigade, Security duties and shop floor jobs where moving machinery may cause risk to life if they suffer from a fit in the vicinity.

24. MISCELLANEOUS :

- Signs of mental retardation, incontinence of urine or enuresis, at the time of preemployment examination will declare candidate unfit for employment.
- Other investigations : Biochemical tests, ECG and other special investigations will be done as per routine and any deviations from the normal limits will be properly investigated before passing the candidate fit.
- Ultrasonography will be carried out whenever required to rule out any disease condition.

- Medical Examination report in prescribed format shall be filled by the examining Doctor / Authorised medical officer and submitted to HR Where a candidate is found to be unfit the report from doctor/ authorized medical officer will be sent to HR Deptt. to inform the candidate suitably

25. DEFECTS :

Congenital or acquired physical defects, if any noticed, will be recorded on the medical examination form with a clear opinion as to whether it is likely to interfere with the efficient performance of the duties for which the candidate is under consideration for employment. The norms and standards shall however be further relaxed for Physically Challenged candidates as per government guidelines.

26. The following additional points should be observed :

(a) The candidate's hearing in each ear is good and that there is no sign of disease of the ear. In case it is defective the candidates should be examined by the ear specialist, Provided that if the defect in hearing is remediable by operation or by use of a hearing aid, a candidate cannot be declared unfit on that account provided he/she has no progressive disease in the ear.

(b) that his/her speech is without impediment ;

(c) that his/her teeth are in good order. That he/she is provided with dentures where necessary for effective mastication (well filled teeth will be considered as sound).

(d) that the chest is well formed and his chest expansion sufficient; and that his/her heart and lungs are sound:

(e) that there is no evidence of any abdominal disease;

(f) that he/she is not ruptured;

(g) that he/she does not suffer from hydrocoele., a severe degree of varicocele, varicose veins or piles;

(h) that his/her limbs, hands and feet are well formed and developed and that there is free and perfect motion of all joints;

(i) that he/she does not suffer from any inveterate skin diseases;

(j) that there is no congenital malformation or defect;

(k) that he/she does not bear traces of acute or chronic disease pointing to an impaired constitution

(l) that he/she bears marks of efficient vaccination ; and

(m)that he/she is free from communicable disease.

(n) Following shall be considered as disqualification
-Ischemic Heart Disease.

- Organic/ Valvular/ Congenital Heart Disease with definite clinical signs & symptoms.
- Bronchial Asthma for Site locations.
- Chronic Obstructive Pulmonary Disease.
- H/O Lobectomy / Pneumonectomy.
- Cirrhosis or Chronic Liver Disease.
- Seizure disorders, Parkinsonism, Ataxia, Psychosis or any other Major Neurological Disorder.
- Chronic renal failure
- Undescended Testes
- Deformity of Spine or any limb, congenital or acquired
- Any organ transplant except corneal transplant
- Cancer with life expectancy highly reduced will be a disqualification

27.0 Recruitment Of Persons With Disabilities

27.1. Persons with following Benchmark Disabilities

27.1.1. Blindness and low vision

27.1 .2. Deaf and hard of hearing

27.13. Locomotor disability including cerebral palsy, leprosy cured, dwarfism, acid attack victims and muscular dystrophy

27.1.4 Autism, intellectual disability. specific learning disability and mental illness

27.1.5. Multiple disabilities from amongst persons under clauses 27.1.1 to 27.1 4 including deaf-blindness, and with prescribed induction level qualification except Fire & Safety may be recruited against an identified post and all other work areas as per fair assessment of his/ her ability/ disability provided:

- The candidate except for the handicap must be within the normal range of all other physical standards, prescribed for the identified post.
- The identified posts shall be such where a PwBD can perform his/her duties with reasonable efficiency and without undue physical strain or hazard

28.0 Appeal

- If a candidate is not satisfied with the outcome of the medical examination, the candidate may apply to the appointing authority for reconsideration. If the appointing authority is satisfied that there should be a review, reconsideration / re-examination, the matter may be referred to Company's Nominated / empaneled hospital/ Medical Board for a review. **The cost of such review shall be borne by the Company.**
- The application for reconsideration is to be submitted within two weeks from the communication of the result of the medical examination.
- All expenses on travel, accommodation etc. in connection with re-evaluation will be borne by the candidate if declared unfit by the Company's Nominated / empaneled hospital / Medical Board.
- The decision of the Nominated / Empaneled hospital/ Medical Board will be final and binding to both the parties.
