NATIONAL CERTIFIED
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TECHNICAL STANDARDS

NCFET-FE-001:

Fitness Equipment Technician Core Competency and Professional Practice Standard

PUBLIC REVIEW DRAFT

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Proposed minimum requirements for technicians and service organizations that work on stationary indoor fitness equipment in commercial and institutional facilities.

NCFET invites public review and field testing. This draft is pending technical committee approval and has no effective date. It has not been approved as an American National Standard.

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For public review, cite the draft version and clause number with each comment. Annex D provides the comment format.

1. Scope and application

1.1. Purpose

This draft defines the minimum competencies and work practices for servicing stationary indoor fitness equipment. It covers work planning, hazard control, inspection, diagnosis, repair verification, equipment status decisions, and service records.

1.2. Places, machines, and jobs covered

The proposed first edition covers commercial and institutional sites such as gyms, recreation centers, hotels, apartment gyms, and workplace gyms. It applies to treadmills, stationary bikes, ellipticals, steppers, rowers, selectorized and plate-loaded machines, cable-operated machines, functional trainers, fixed and adjustable benches, and power racks.

It covers assigned inspections, preventive maintenance, troubleshooting, repairs, and checks after assembly or relocation. Clause 7 also addresses planning and oversight for recurring inspection and maintenance of covered assets. Employees and independent providers performing covered work must follow applicable laws and regulations.

1.3. Work outside this standard

This draft excludes home-only service, medical devices, outdoor fitness equipment, pool equipment, and fixed sports equipment such as basketball backstops. Product design and conformity testing, building wiring, structural engineering, regulated trades, and site-wide safety have their own requirements. This draft addresses only the service work within its scope.

Anchoring, welding, making load-bearing parts, repairing circuit boards, and changing safety systems require a separate work scope and documented authorization under Clause 4. If a covered job requires work beyond the assigned technician’s skills or authority, refer that part of the job to a qualified specialist.

1.4. How to read the rules

“Must” marks a requirement for work covered by the standard. “Should” marks a recommendation. “May” means something is allowed. Clauses 1 through 11 contain the proposed requirements. Annexes A through E are informative and provide guidance and examples.

Identify applicable tasks from the law, service instructions, the authorized scope of work, and any safety decision required under Clause 9. Obtain and document authorization for assigned service work under Clause 4.3. Identify a partial inspection as such in the service record and record its limits.

1.5. Using this standard

NCFET proposes this as a voluntary U.S. standard. Anyone who adopts it must identify the edition and work covered. Before starting, meet any applicable qualification, licensing, employer authorization, site access, and manufacturer approval requirements. See Clause 11 for conformity claims.

2. Applicable sources and acceptance criteria

2.1. Find the rules and guidelines for the job

The service organization must identify applicable laws and regulations, site safety rules, service instructions, and relevant guidelines. The technician must match the instructions to the machine's brand, model, serial number or production range, setup, and installed options.

Check for applicable safety notices, recalls, and service bulletins. Record the sources used and their versions, dates, or other details that allow someone to find them again.

2.2. Use each source for its intended purpose

Follow applicable laws and regulations, model-specific service instructions, recall or corrective action directions, and compatible site safety rules. Use product design standards to help identify hazards and select checks. Use a product design test as a field acceptance test only when applicable service criteria call for it or a competent authority documents that the test is suitable for the machine and task.

2.3. Stop when key instructions are missing or conflict

The technician must stop the affected task if required instructions conflict, the machine's setup cannot be confirmed, or the criteria for a safety check are missing. Record the issue and refer it to the manufacturer, the group responsible for the rule, or another competent authority. Apply Clause 9 if safe use cannot be verified.

If manufacturer service information is unavailable, an alternative method requires a documented technical basis, acceptance criteria, and approval from a competent authority responsible for the method. The method must satisfy applicable laws, safety notices, and manufacturer restrictions. If safety-critical acceptance criteria cannot be established, stop the affected task and apply Clause 9.

2.4. Sources to check

Use this list to identify rules and guidelines for the job. Check which laws and regulations apply to the work and location, and which version of each technical source applies.

Source	Why to check it
OSHA 29 CFR 1910.147 and 1910.333	Federal workplace regulations for controlling dangerous energy and working safely around electricity, where they apply.
OSHA 29 CFR 1910.132	Federal workplace regulations for protective gear, where they apply.
California Title 8 § 3314 and § 2320.4	California workplace regulations for controlling dangerous energy and working on electrical parts with the power off.
ISO 20957-1:2024 and relevant equipment-specific parts	Safety requirements and test methods for stationary fitness equipment.
ASTM F2276, F2115 and F1749	Technical standards for gym equipment design, treadmills, and safety signs for machines and sites. Check other ASTM documents for the machine when needed.
U.S. Consumer Product Safety Commission and manufacturer notices	Check for recalls, stop-use notices, and instructions for correcting the problem.

3. Terms and definitions

Term	Meaning in this standard
Acceptance criteria	Written limits or conditions that show whether a check or test passes.
Affected equipment	The machine and any related equipment that may be at risk because of the work, an incident, a fault, or a shared condition.
Asset identification	A serial number or other recorded ID that distinguishes one machine at a site from another.
Authorized scope of work	The jobs and types of equipment a person may work on. This depends on proven skills, approvals, limits, and any qualifications the law requires.
Competent authority	A person or organization with the skills and the legal or contractual authority to resolve the issue, such as a manufacturer, engineer, or designated safety official.
Energy isolation	Separating the machine from hazardous energy sources and controlling stored energy under the applicable procedure.
Facility representative	The person the site puts in charge of receiving service and safety notices and planning the site’s response.
Functional verification	Checking and recording whether the machine works as intended and whether affected safety features meet the acceptance criteria.
Out of service	A status that prohibits use and requires steps to prevent access or operation.
Qualified person	A person who meets the applicable qualification requirements for the task and its hazards.
Release authority	The designated person who authorizes return to use after technical clearance and all other release conditions are met.
Safety-critical	A part, feature, or condition that could reasonably lead to injury if it fails, is missing, or is set incorrectly. Examples include guards, restraints, load supports, stability, and stop controls.
Service organization	The business, team, or person working alone that assigns, manages, and records service work. Also called a service provider.
Technician	A person who checks, maintains, troubleshoots, or fixes covered gym equipment within the job assigned.
Technical clearance	A written decision by an authorized technician that required checks passed and the safety concerns behind any hold were resolved. See Clause 9.4 for release.
Verification hold	An out-of-service status used when a possible safety issue remains unresolved or a required check, record, criterion, or release approval is missing.

3.1. Keeping users and workers safe

An out-of-service notice tells the site and users that a machine is off-limits. Hazardous energy controls protect workers during service. Apply both sets of controls when both are required.

4. Responsibilities and authorization

4.1. Service organization

The service organization must define the assignment, verify competence and authorization, provide suitable instructions and tools, and designate a safety and technical contact.

Before exposure, coordinate overlapping work and energy controls with other employers and contractors. Record each person’s authorization and limits.

4.2. Facility operator

The facility operator must designate a facility representative and release authority, disclose known hazards and access limits, and coordinate user access. For recurring maintenance, the facility operator must designate responsibility for the plan under Clause 7.2.

The facility operator must maintain out-of-service restrictions until release is recorded. The service organization must document who maintains them after handoff and escalate any gaps. One person may fill several roles if qualified and authorized for each.

4.3. Technician

Accept only work within demonstrated competence and authorization. Document the scope through a standing agreement, work order, or other approved instruction. Record approval before expanding scope. Obtain applicable manufacturer approval for warranty work.

Stop affected work if a required safety control is inadequate or refused. Record and report the issue and apply Clause 9. Stop-work decisions, hazard reports, and withholding clearance require no additional work authorization.

4.4. Which jobs need extra approval

Work category	What is needed before assigning the job
Routine checks, cleaning, adjustments, and upkeep	Proven skills for this type of machine, the right instructions, required energy controls, and site approval where needed.
Finding, fixing, or setting up mechanical or electrical parts on the machine	Proven skills and authorization for the task, written service procedures, and any qualifications or manufacturer approvals that apply.
Work on or near exposed energized parts	Separate qualifications and authorization for the task and hazard. Record why applicable rules allow the work and follow Clause 6.
Building wiring, structural changes, load-bearing welds, custom parts or cables, or safety feature changes	Refer the work unless it meets applicable laws, contract terms, manufacturer requirements, and any required engineering or other technical approvals. Document how each condition is met and obtain approval for the test plan before starting.

4.5. Supervised work

The service organization must assign a competent, authorized supervisor and set the level of supervision based on task hazards and trainee ability. The supervisor must verify safety controls before exposure, intervene when needed, and sign applicable service records.

Trainees must meet any individual legal qualification for the task. Only an authorized technician may issue technical clearance.

5. Core competency and evidence

5.1. How to check skills

Before assigning unsupervised work, verify competence through observed work, a practical demonstration, or equivalent evidence. Use conditions and equipment representative of the assignment.

Use a simulated task if a field demonstration would be unsafe. Record the technician, assessor, date, equipment or scenario, tasks, results, and limits.

Skill	What the technician does	Proof to keep
C1 Identify and plan	Names the machine, finds the right instructions, and states the job.	Machine record and list of sources used.
C2 Control hazards	Spots hazards, puts safety steps in place, and checks that it is safe before anyone is exposed.	Observed or practice setup and safety check.
C3 Inspect	Finds key parts, checks their condition, and records any issues or limits.	What the check found and what was decided.
C4 Diagnose	Chooses safe tests, explains results, and separates facts from possible causes.	Test record and reason for the conclusion.
C5 Maintain and repair	Chooses suitable parts and methods, puts guards back, and makes needed adjustments.	Observed work or checked work sample.
C6 Verify and support release	Checks affected functions, records equipment status, and gives technical clearance only when its conditions are met.	Test results and evidence supporting the status decision.
C7 Record and communicate	Writes down the work and tells the site about limits and next steps.	Work order and record of what the site was told.
C8 Know when to stop or ask for help	Identifies missing skills, instructions, or approvals and refers the issue to the right person.	A stop-work choice on a real or practice job.

5.2. Assessing task competence

A competent assessor must apply documented criteria and record each task result, any limitations, and tasks outside the assessment scope.

A safety-critical error bars independent authorization for the affected task until correction and successful reassessment. Training and credential records may supplement evidence of task performance.

5.3. Keep skills up to date

Set a risk-based review interval. Review authorization after major equipment or procedure changes, incidents or competence concerns, or absences that may affect performance.

If a complaint or other information raises reasonable doubt about competence, the service organization must restrict affected work until competence is confirmed. Notify the technician and record the basis, reassessment, and any restored authorization.

6. Work planning and hazardous energy control

6.1. Check before work starts

Before starting, the technician must confirm the machine, assigned work, site contact, known incidents, and current restrictions. Identify the work area and who could be at risk.

Check for hazards from electrical supplies, capacitors, batteries, gravity, raised decks, weight stacks, springs, belts, flywheels, pinch points, and unexpected movement. Consider lifting, sharp edges, chemicals, unsecured components, and site conditions. Select suitable barriers, energy-control devices, tools, supports, and personal protective equipment. Stop and reassess if conditions change.

6.2. Cut off energy and check that it is safe

If unexpected startup, movement, or release of stored energy could cause injury, an authorized person must establish and verify a safe state before exposure. Follow the applicable procedure for notification, shutdown, isolation, lockout or tagout as required, control of stored energy, verification, and restoration.

Identify all energy sources, including backup supplies and stored energy that can reaccumulate. Control and verify stored energy, including electrical charge and suspended loads, under the applicable procedure. Use supports suitable for the load and task. A stop button, console switch, interlock, or service-mode setting alone does not isolate energy.

6.3. Machines that plug in

Use unplugging in place of lockout or tagout only when the applicable rule allows it and all conditions are met. Under the federal cord-and-plug exception, unplugging must prevent unexpected energization or startup, and the servicing employee must have exclusive control of the plug. Assess and control stored energy separately. If the exception cannot be confirmed, follow the applicable energy-control procedure.

6.4. Tests that need power or movement

Test with power off whenever that can give the required result. If power or movement is needed, identify the test, its limits, who may perform it, and the controls needed before energizing. Keep others clear, use the required guards, test tools, and protective measures, and stop if conditions depart from the test plan.

For work on or near exposed energized parts, document the basis for performing the task energized as permitted by the governing rule. Only persons qualified and authorized for the task may perform it, with the required protective controls. When further service requires isolation, reapply and verify energy controls before re-exposure.

6.5. Hand off the job and restore power

Follow the applicable procedures for group work, shift changes, and temporary energization. The person who applied a lock or tag must remove it unless the governing rule permits removal under a documented employer procedure. Before restoring energy, account for personnel and tools, confirm the machine is ready, and notify affected people as required.

At a shift change, handoff, or departure before release, maintain required controls and record the equipment status. Use Clause 9 to determine when users may regain access.

7. Inspection and preventive maintenance

7.1. What to check and in what order

Choose checks based on the machine type, model instructions, reported problem, assigned work, and hazards found. Establish a safe state. Perform the applicable visual and physical checks before tests that require power or a load.

Record each required check or group of checks as passed, failed, incomplete, or not applicable. Give the reason for incomplete checks and explain why a check does not apply if the reason is unclear. Identify visual checks as such. A visual check cannot replace a required functional test or measurement.

Inspection area	Check as applicable to the machine and assignment
Structure and stability	Check frames, joints, mounting points, and required anchors for damage, deformation, or corrosion. Verify level, stability, and required clearances.
Moving parts and guarding	Check covers, guards, pinch and trapping points, belt path, rollers, pulleys, chains, and drive parts. Check for unintended contact through the range of motion using the required safe method.
Electrical and controls	Inspect the accessible cord, plug, inlet, and visible wiring. Use the required tests to check startup, stop controls, interlocks, and response to controls.
Cardio equipment	Check applicable walking belts and decks, belt tracking, incline, resistance, pedals and cranks, steps and treads, seat locks, rails, and supports. Check accessible drive components for wear, damage, abnormal play, or noise. Verify adjustments and lubrication where specified by the service procedure.
Strength equipment	Check applicable cables and coverings, end fittings, belts, chains, pulleys, weight-stack guides, selectors, stops, catches, safety arms, load supports, and retention hardware. Check adjusters and locks, cable tracking, frame condition, and stability.
User contact and information	Check grips, foot supports, adjustment locks, labels, and safety instructions. Check padding and surface condition where they affect safe use. Record contamination that affects inspection, operation, or safe use.

7.2. Plan recurring inspection and maintenance

For assets covered by an ongoing inspection or maintenance program, the facility operator must establish or approve a written plan and designate who maintains it. The service organization must confirm its assigned tasks, reporting duties, and exclusions before work begins. A one-time service assignment must document its scope, findings, and follow-up under Clause 10.

The plan must identify the assets covered, including each asset's location and traceable identifier, and state which party performs each task. Distinguish routine observations assigned to facility personnel from work requiring a competent, authorized technician.

For each asset or group of comparable assets, record the applicable service instructions, tasks, initial frequencies or triggers, and acceptance criteria. Include how due and overdue work is tracked, who receives exceptions, and how corrective work is assigned and closed. Record completion and status decisions by individual asset.

Set initial task frequencies from applicable mandatory intervals and model-specific instructions. Where these sources allow discretion or specify no interval, document the basis using usage or duty cycle, environment, equipment condition, fault history, and consequences of failure. Grouped schedules must account for model-specific differences. An adjustable interval must remain within applicable mandatory and manufacturer limits.

7.3. Perform work and act on findings

Perform only authorized maintenance using applicable procedures and compatible materials. Follow specified lubrication, adjustment, and tightening requirements. Record operating hours, cycles, or other use data when relevant and available, along with the condition found, work performed, and due date or trigger for the next task.

Compare findings with the documented criteria. Examples of condition indicators include recurring faults, abnormal noise or play, repeated loss of adjustment, and trends in wear or corrosion. Record and route adverse findings for corrective action. When a safety-critical concern remains unresolved, apply Clause 9.

7.4. Incomplete checks and deferred maintenance

Record each incomplete check or deferred maintenance item, its reason, its effect on equipment status, and the required follow-up. Record the assignment as incomplete when required work remains open. If an incomplete check leaves a safety-critical condition unresolved, apply Clause 9. Equipment may remain available when required safety checks pass, no unresolved safety issue warrants a hold, and any required release is documented.

7.5. Review and update the plan

The facility operator and service organization must review the portions of the plan within their responsibilities at a documented interval. Review sooner when usage, environment, equipment configuration, manufacturer instructions, or service findings materially change. Include recurring defects, overdue tasks, repeated holds, and the effect of prior adjustments to the plan.

Record the basis for changes to task frequency, scope, or criteria, the approving role, and the effective date. Update the affected asset schedules and communicate changes to the people who perform or oversee the work. Review of a schedule does not authorize use of equipment that remains out of service under Clause 9.

8. Diagnosis, repair and verification

8.1. Find the cause

Record the reported problem, when it occurs, and relevant prior work. When appropriate, try to reproduce it under controlled conditions. Use the evidence to choose the order of checks. Check installation, mechanical parts, energy supply, controls, and settings as applicable.

Record relevant fault codes, readings, test conditions, and acceptance criteria. List unresolved faults that come and go and tests that could not be run. A code, part swap, or temporary change in the symptom alone does not establish the cause.

8.2. Tools and measurements

Choose tools and meters suited to the task, range, accuracy, and hazards. Inspect them before use. Confirm calibration or proper operation when the test method, manufacturer, law, or work procedure requires it. Record the instrument ID when its reading supports a safety-critical decision.

If a tool later proves unreliable, review the decisions that relied on it. Repeat the affected checks as needed. If technical clearance can no longer be supported, notify the facility and apply Clause 11.3.

8.3. Parts, software, and changes

Verify replacement part compatibility with the model, configuration, and intended function. For safety-critical parts, record the part number and any available lot, serial, or other traceable ID. For a substitute, record the source and technical basis for accepting relevant characteristics, such as load or electrical ratings. Refer the issue and withhold clearance if safety-critical suitability cannot be established.

Follow approved procedures for firmware and settings. Preserve required settings and check affected safety features after updates. Keep the machine out of use if a safety feature is bypassed, a safety-critical change is undocumented, or a recall restriction remains in effect.

8.4. Test before giving technical clearance

After assigned repairs, adjustments, installation, or relocation, verify the items affected by the work or fault. These may include assembly, fasteners, guards, connections, clearances, stability, and safety features.

Perform checks under controlled conditions using the applicable order and method. Start with the least hazardous suitable test. Record the acceptance criteria and actual readings with units or observed behavior. Apply Clause 9 when a check fails or is incomplete. After correction, repeat the required checks before issuing technical clearance.

8.5. Problems you cannot repeat or that keep coming back

If you cannot reproduce the complaint, record what you tried and under what conditions. If the report points to unexpected motion, electrical danger, loss of load support, or another unresolved safety-critical fault, keep the machine out of use under Clause 9 until the evidence supports release. Refer repeat safety-critical failures to the service organization and the competent authority before release.

9. Equipment status and release

9.1. Choose and record one status

Status	When to use it and what to do
Available for use	Required safety checks passed, no known safety-critical issue remains open, and any required release is recorded. State the scope of the checks and list non-safety follow-up separately.
Out of service - defect or restriction	A known safety-critical defect, unsafe condition, or applicable stop-use direction exists. Prevent use and record the corrective action or referral. Use this status even if more checks are pending.
Out of service - verification hold	A safety concern is unresolved, required safety verification is incomplete, or facility release is pending. Prevent use and document what remains open. A known safety-critical defect or stop-use direction takes priority.

9.2. Keep people away and tell the site

For either out-of-service status, the technician must prevent use within their authority. Post a clear notice and restrict access or operation using controls appropriate to the hazard and site. Withhold technical clearance until required checks pass and applicable safety concerns are resolved.

Promptly notify the facility representative of either out-of-service status and the action needed. Escalate immediately through the agreed safety contact if effective restrictions cannot be established or confirmed. Record the status, time, restrictions, person notified, acknowledgement or contact attempts, who will maintain restrictions, and any unresolved handoff. Maintain separate service energy controls as required.

9.3. Recalls, incidents, and evidence

If a recall or stop-use notice applies, follow its restrictions and remedy instructions. If it may apply and raises a credible safety risk, use a verification hold while confirming whether it applies, unless a known defect or restriction already requires the other out-of-service status.

After an injury, serious near miss, or suspected product failure, prioritize emergency response and hazard control. Preserve records and evidence within your authority and record any changes needed to make the area safe. Refer further testing, disposition, and legally required reporting to the responsible party. Protect personal information and separate facts from conclusions.

9.4. Return to use

Before issuing technical clearance, the authorized technician must verify the correction or resolve the suspected condition, complete the required checks, and document the evidence for that machine. If technical clearance is issued while facility release is pending, keep the machine out of use and record “Technical clearance issued - facility release pending” as the reason for the verification hold.

The release authority must confirm technical clearance and any remaining release conditions, then record the release and its time. Keep user restrictions in place until release is recorded. If release is pending at departure, complete the notification and handoff under Clauses 9.2 and 10.4. Work-order closure, customer consent, or power-on alone is insufficient evidence for release.

10. Service records and professional conduct

10.1. What to record

The technician must create a dated record for each machine serviced and identify who prepared it. One report may cover several machines if each finding and decision can be tied to the right machine. Include the items below that apply and explain any missing required information.

Record section	What to write down
Machine and job details	Work order, site, machine ID, technician, date, requested work, limits, and machine status at the start.
Instructions and safety steps	Instructions and versions used, applicable notice or recall checks, and key hazards and controls. A reference to the related safety record may be used.
Findings and work	Reported problem, task findings, tests and conditions, maintenance completed, repairs, part IDs, deferred items, and next due date or trigger where applicable.
Test results and machine status	Acceptance criteria, results and units, completion of assigned work, equipment status and reason, and technical clearance and facility release as applicable.
Who was told	Recipient, time, method, restrictions, person responsible for maintaining controls, confirmation or escalation attempts, and follow-up.

10.2. Keep and correct records

The service organization must keep records that are readable, easy to find, and linked to the right machine. For each correction, record who made it, when, and why. Preserve the original entry or an equivalent change history.

Set and document a retention schedule based on applicable laws, contracts, and work needs. Preserve records subject to an investigation, claim, or legal hold. Give the facility the record or agreed extract with enough detail to understand equipment status, restrictions, and next steps.

10.3. Be clear and honest

The technician must accurately describe their qualifications, scope of work, findings, approved prices, and results. Distinguish observations, measurements, reports from others, and professional judgment. Disclose conflicts of interest that could affect judgment.

Protect facility records, access credentials, photos, and personal information. Collect only what is needed and use approved channels to send it. Promptly correct and report errors that could affect a safety decision.

10.4. Hand off work and track what is left

For each open item, record the responsible party, the condition for closure, and any agreed or required due date. Communicate the last known equipment status, controls, hazards, and work limits to the receiving party. Confirm acceptance before recording the transfer as complete. If acceptance or implementation of a safety restriction is unconfirmed, record the outstanding handoff and escalate under Clause 9.2.

11. Conformity and corrective action

11.1. Show the work met the rules

The service organization must be able to show that the people who performed the work under review had the required skills and authorization. Provide the work order, instructions used, equipment status, and any notification or release records.

A claim that work meets this standard must identify the edition, work covered, date or period assessed, responsible party, and any limits. List unmet requirements and explain how they limit the claim. Teams field-testing this draft may report results by draft clause number.

11.2. Review completed work

The service organization must document how it reviews completed work. Select samples based on risk and include the types of work claimed to conform over the review cycle. Check asset records, recurring faults, overdue or incomplete tasks, safety holds, and release decisions. For recurring maintenance, provide relevant findings to the facility operator for review under Clause 7.5.

11.3. Fix work that missed the rules

When a significant service problem is found, the service organization must record it, identify the equipment or records affected, and assess whether the current status should change. If clearance can no longer be supported, notify the facility promptly and request or reinstate the appropriate out-of-service status.

Correct or repeat the work and check whether similar jobs are affected. Record what was done to prevent a repeat. Verify that the corrective action worked before closing the issue.

11.4. How this standard relates to certification

This standard sets requirements for service work and its records. A separate personnel certification program may use validated competencies to set eligibility, assessment, renewal, and credential status rules. Conformity to this standard is determined by the applicable clauses and evidence for the work. Purchasing NCFET coursework or joining a provider network has no bearing on that determination.

Annex A. Service record worksheet

This sample worksheet is for guidance. You may copy it into your work-order system.

Record section	What to write down
Machine and job details	Work order, site, date, technician, brand, model, serial number, machine tag, assigned job, and starting status.
Plan and instructions	Service document and version, planned tasks and due dates or triggers, notice search and result, hazards, controls, and work limits.
Check log	Item, method, acceptance criteria, result and units, and whether it passed, failed, was incomplete, or did not apply. Record the reason where needed.
Work done to fix the problem	Findings, work performed, parts and IDs, open actions and responsible party, and next due date or trigger where applicable.
Final machine status	Equipment status and reason, service completion, restrictions, facility contact and time, acknowledgement, and who issued technical clearance and release and when.

A.1. Sample work order

This fictional work order illustrates the record from initial restriction through release. On an actual work order, identify the machine and the people involved.

Event	Example entry
First visit	Work order WO-1042, treadmill T-07, sample serial EXAMPLE-001. A user reported that the stop key sometimes failed. The technician blocked access before testing. The belt kept moving when the key was removed during the required test. The technician recorded “Out of service - defect or restriction.” The facility representative confirmed the restriction at 10:20 a.m.
Repair visit	The technician installed the compatible stop-key switch listed on the work order, refitted the covers, and verified start and stop functions using the recorded procedure. The belt stopped as required in each check. The technician issued technical clearance at 2:05 p.m. The equipment remained out of use pending facility release.
Facility release	The release authority reviewed the clearance, confirmed any remaining release conditions were met, and recorded release at 2:15 p.m. The facility then removed the restriction. The work order keeps the record of the initial status and confirmation.

A.2. Recurring maintenance plan entry

For each asset or group, record the location and asset IDs, task and criteria, governing instructions, frequency or trigger and its basis, assigned role, and next due date. For each completed visit, record the asset, condition found, task result, corrective action or follow-up, and equipment status. Identify the plan owner, review date, and approved changes.

Annex B. Decision examples

These examples illustrate decisions under Clause 9. The service instructions that apply to the machine determine which checks to run and what counts as a pass.

What you find	What to do
A treadmill emergency stop fails its test	Assign out of service - defect or restriction. Restrict access or operation, notify the facility, and record the failed check. Verify the correction using the applicable method before technical clearance.
The end of a strength machine cable looks damaged and the model's pass limit is missing	Prevent use with an effective restriction appropriate to the hazard and notify the facility. If damage affecting load support is confirmed, record "Out of service - defect or restriction." If the safety significance is unclear, assign a verification hold and obtain the applicable acceptance criteria.
Someone reports the machine moves on its own at times, but you cannot repeat it	Assign out of service - verification hold. Record the reported conditions, attempts to reproduce the issue, and checks performed. Notify the facility and obtain evidence resolving the concern before issuing technical clearance.
Wear affects only how the machine looks	If required checks pass and the wear does not affect safe use or operation, record it and any recommended follow-up separately. Record the scope of the decision to allow use.

Annex C. Development and maintenance of the standard

This informative annex describes how NCFET proposes to develop, validate, approve, and maintain NCFET-FE-001. The process is intended to keep the standard grounded in field practice and its requirements clear enough to apply consistently across equipment types, service providers, and facilities.

C.1. Technical oversight and approval

NCFET should convene a balanced technical committee that includes independent and manufacturer-affiliated technicians, equipment manufacturers, facility operators, and other affected interests, such as workplace safety specialists. The committee should oversee technical content, review evidence supporting proposed requirements, and vote on the draft and subsequent revisions.

NCFET should publish the committee's scope, represented interests, and procedures for managing conflicts of interest, voting, public comment, appeals, and interpretations. Technical decisions should be made independently of course sales and individual certification decisions. Keep committee membership, disclosures, minutes, ballots, comments and their disposition, and reasons for substantive revisions in the project record.

C.2. Job-task analysis and field validation

The committee should use interviews, direct observation, de-identified service records, and a structured survey. Include technicians and facility personnel from different regions, service organizations, and facility types with experience across representative equipment classes. Identify who performs, authorizes, and verifies each task and who controls equipment status after departure. Evaluate frequency, consequences of error, and the level of independent judgment required. Consider infrequent tasks when errors could result in serious injury or an unsafe return to service.

For each proposed requirement, document the task or hazard, supporting evidence, and how compliance can be verified. Review clauses against applicable regulations, equipment standards, and model-specific manufacturer instructions. Where methods or limits vary by model, specify how to identify, apply, and record the governing criteria.

Before balloting, have technicians and facility personnel from different organizations apply the draft to representative equipment and comparable scenarios. Compare energy controls, inspection and diagnostic findings, incomplete checks, equipment status decisions, and handoffs. Determine whether material differences arise from the wording or from legitimate differences in equipment or site conditions. Clarify or revise affected clauses before balloting.

Before final approval, document how the committee addressed material public comments and unresolved objections. Submit substantive changes for further review under the published procedures.

C.3. Review, interpretation, and revision

NCFET should publish the current edition, its effective date, and a revision history that distinguishes technical changes, editorial corrections, and formal interpretations. An interpretation should explain how the existing text applies. Changes to obligations, acceptance criteria, or assigned responsibilities should go through the revision and approval process.

The committee should establish a regular review cycle and review affected clauses sooner when incident findings, recalls, safety notices, regulatory changes, revisions to referenced standards, or recurring field questions indicate a need. Document whether each review results in reaffirmation, revision, or withdrawal. For a revision affecting field practice, identify changed clauses, the effective date, and any transition provisions.

ANSI's Essential Requirements may inform the procedures for openness, balance, public review, and appeals. Any future accreditation application should follow the process applicable to standards development or personnel certification.

Development reference for Clause 7. ANSI/ASHRAE/ACCA Standard 180, Standard Practice for Inspection and Maintenance of Commercial Building HVAC Systems, provides a comparison for structuring a maintenance program. FE-001 applies its own requirements to stationary fitness equipment. ASHRAE standards access

Annex D. Public review and clause traceability

This annex gives key questions for public review and shows what to include in a comment.

D.1. Questions for reviewers

1. Do the machines and tasks covered match the work technicians do in gyms and other facilities? Which ones need a clearer description?
2. Can people use the inspection and release rules across brands while still using limits for each model? Do any rules call for product design tests on service jobs?
3. Do the energy rules clearly explain the difference between routine checks, tests with power on, and work that puts someone near dangerous energy?
4. Can independent service providers and facility teams use the same process, including on older equipment with missing instructions?
5. Is it clear who gives technical clearance, who allows use again, and who takes over when the technician leaves and cannot block access?
6. Can the same competency evidence be collected across equipment and work settings? Which assessments need a scenario, clearer criteria, or another method?

D.2. How to send a comment

Use the submission method listed in the NCFET public notice. Include the draft version, clause or table row, proposed wording, and the reason for the change. Add supporting sources or examples when available.

Identify the affected machine type, work setting, or group if relevant. Remove details that identify customers or workers. The notice should give the deadline and explain how comments will be reviewed.

D.3. Match trial decisions to rules and records

What to review	Relevant clauses	Records to check
Person had permission for the job	4 and 5	Assigned work, qualifications, limits, and proof of skills.
Machine was made safe before anyone was exposed	6	Required steps and a safety check that someone saw or recorded.
Required check was done or the limit was recorded	7 and 8	Machine record, instructions, pass rules, and results.
Machine was kept out of use as needed	9 and 10	Status, steps to block access, who was told, and follow-up.
Evidence supported return to use	8 through 10	Repairs, check results, technical clearance, and release.
A serious problem with the work was fixed	11	Review of affected machines, the fix, and proof the issue was closed.

Annex E. Job-task analysis record

Use this worksheet to link job tasks to the proposed requirements. The committee should agree on how to collect evidence and make decisions before gathering survey responses.

E.1. What to record about the study

Part of the study	What to keep
Task description	What the worker does, machine type, expected result, typical work conditions, and skills or facts the worker needs first.
Who took part	Roles, work settings, experience levels, machines they work on, areas covered, and how people were invited. List groups missing or with too few people.
Ratings	How often the task is done, what could happen if it goes wrong, and how much help workers should need. Explain the rating scale. Separate “I don’t know this task” from “I don’t think this task is needed.”
Decision about the task	Make it a basic skill, put it under a machine type or specialty, or set it aside. Record the rule used, exceptions, and why, including for rare tasks where a mistake could cause serious harm.
Links to rules and proof	Link each task ID to a clause, a test situation, what a person should do, what proof to keep, and mistakes that could lead to injury.

E.2. Check the results and save the decisions

Compare results by group and machine type before combining them. Investigate major differences through interviews, record reviews, or practical trials. Keep the study version, limits, committee decisions, and approvals. Publish combined results and remove identifying details from examples.

E.3. Try the rules on real jobs

Try selected requirements with technicians from more than one service organization and on different models. For each test case, record the instructions, controls, checks, equipment status, and supporting evidence.

Compare the findings and decisions. If teams reach different conclusions from the same facts, revise the clauses that led to the difference. Record the reason for each change that affects a requirement.