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# FIRESAFETY BUILDING FIRESAFETY INSPECTION AND QUALITY MEASUREMENT

	<u>CONTENTS</u> <u>PA</u>	<u>GE</u>	1. GENERAL
1. 2. 3. 4. 5.	GENERAL       INSPECTION FORM AND CHECKLIST         INSPECTION FORM AND CHECKLIST       .         PRELIMINARY PROCEDURE       .         INSPECTION PROCEDURES       .         PRINCIPAL CONDITIONS TO BE OBSERVED         .       .         INSPECTIONS-CLASSIFICATION NO. 1         HOUSEKEEPING-CLASSIFICATION NO. 2         .       .         ELECTRICAL PROTECTION-CLASSIFICATION         NO. 3	1 2 3 3 4 4 4 5	<ul> <li>1.01 This section replaces AT&amp;T Section 770-310-300. It is issued to out- line a procedure for inspecting and evaluating the administration of firesafety responsibilities in the building operation organization, to observe that work is being performed in accordance with the established firesafety standards, and to recommend preventive or corrective measures as re- quired by the operations or the methods employed. It is intended to serve as an aid for the administration of this function within the building operation organizations.</li> <li>1.02 Whenever this section is reissued.</li> </ul>
	OCCUPANCY CONTROL-CLASSIFICATION NO. 4	5 5 6	<ul> <li>1.02 whenever this section is reissued, the reason(s) for reissue will be</li> <li>listed in this paragraph.</li> <li>1.03 Firesafety in Building Operations may be defined as those efforts</li> <li>exerted on an ongoing basis to insure the</li> <li>proper administration and effective</li> <li>implementation of fire prevention and</li> <li>protection practices.</li> </ul>
6.	NO. 7	6 6 7 7 9	1.04 It is intended that inspections will be made by personnel qualified to recognize and evaluate the firesafety condition of the building and to recommend corrective measures if the quality of the work or methods employed require them. The plan for inspection herein does not super- sede day-to-day supervisory observation or any sections of the Bell System Accident Prevention Plan but should serve to supplement them.

SECTION 770-310-901SW

1.05 Frequency of Inspection: Building firesafety inspections are scheduled at such intervals as local conditions may require. It is recommended, however, that this inspection format be used as part of an operational review by local management to complete a building inspection at least annually at each location.

## 2. INSPECTION FORM AND CHECKLIST

2.01 For the purpose of inspection, firesafety is divided into the following nine classifications:

- 1. Inspections
- 2. Housekeeping
- 3. Electrical Protection
- 4. Occupancy Control
- 5. Portable Fire Extinguishers
- 6. Detection Systems
- 7. Suppression Systems
- 8. Other Building Systems
- 9. Emergency Preparedness

2.02 An inspection report, Form SW-6409 (Exhibit 1), shall be used for guidance and rating in making an inspection. A copy of this form completed for a typical inspection along with example checklists are shown in Exhibit 1. The form provides a list of the classifications as well as space for general information regarding the building upon inspection. Part two of the form contains a checklist and space for notes. Typical conditions to be observed are contained in paragraphs 5.01 through 5.15 of this section and in the checklist. 2.03 Form SW-6409 is available through hard copy requisition procedures. The minimum order through these procedures is 500 copies of the form.

2.04 For ease of identification, notes made on items requiring attention should be referenced by the classification number to which they pertain with specifics as to the exact location.

2.05 The form also includes a table for evaluating results. Numerical values of 0 through 10 are established for each of the nine classifications, and each is then multiplied by its assigned weighting factor. The inspection plan thus indicates whether a balanced job is being done and, if not, where attention is necessary to bring all classifications to the desired level. This may be accomplished by additional redirected effort, more supervisory attention, or other action.

2.06 The conditions observed under each classification are initially considered in terms of Higher Than Objective Band (10.0 - 9.6), Within the Objective Band (9.5 - 9.0), Lower Than Objective Band (8.9 - 7.0), or Unsatisfactory Band (6.9 - 0) with the appropriate quality rating number assigned. For example, a detection system that is being tested in accordance with current practices and has no deficiencies is rated in the Objective Band. Further definition of the bands is as follows:

- (H) Higher Than Objective Band--More than demands, possibly not cost effective.
- (0) Within the Objective Band--Within service demands and cost effective.
- (L) Lower Than Objective Band--Less than satisfactory, needs improvement.
- (U) Unsatisfactory Band--Unsatisfactory service level, immediate attention required.

2.07 Care should be exercised in assigning quality ratings to the various classifications. They should be assigned on an impartial basis and should be based on conditions that exist at the time of the inspection.

2.08 A factor that will influence the total quality value is the absence of one or more classifications in a particular building. For example, the building covered by Exhibit 1 is an equipment building without a suppression system. The letters N/A (not applicable) would be entered in the column adjacent to this classification. The absence of a quality rating in the missing classification would reflect a total quality value lower than if it were included. This is compensated for by dividing the Total Quality Value by the Total Weighting Factor.

2.09 A single form may be used for one building. In the case of a large multistory building, several floors may be selected as representative of the entire building. On subsequent inspections, other floors should be considered for inspection. The selected floors should be noted on the form. A quality result for the entire building is determined from the conditions observed on the selected floors as well as the common systems, such as the suppression and detection systems. If a more detailed report is desired or the size of the building warrants, each floor may be entered on separate forms. These can be averaged and consolidated on a single form to establish an overall quality index for the building.

### 3. PRELIMINARY PROCEDURE

3.01 Before starting the actual inspection, fill in the data on the inspection form (i.e., the date, building name, address, city and state, geographic location code, sector/zone, number of floors, clearance group, building square footage, and population).

3.02 The population includes all company and non-company employees regularly housed in the building.

### 4. INSPECTION PROCEDURES

- 4.01 Inspection is performed by observation of all items shown in the following paragraphs and of any others observed while walking around and through the building from roof to basement.
- 4.02 The items listed in subsequent paragraphs under headings corresponding to the subdivisions on the inspection form are those points that should be considered in rating the quality of the firesafety job being performed.

4.03 It should be noted that the following list is by no means complete, but will serve as a base for evaluating the firesafety job being performed. Other items requiring attention, that become evident during the inspection, should be noted for future reference to the appropriate party. These items should not influence the quality rating assigned to a particular classification.

4.04 The checklist contains two columns adjacent to the principal conditions to be observed. The first is for indicating the condition and should be noted [ ✓ (deviation), OK, N/A (not applicable)] and the second is for notes. The notes made on items requiring attention may be used for reference in preparing annual budgets for firesafety related repair and rearrangement work.

## 5. PRINCIPAL CONDITIONS TO BE OBSERVED

## INSPECTIONS-CLASSIFICATION NO. 1

- 5.01 General:
  - . Fire Protection Consultant Report available.
  - . Building operational recommendations on Inspection Report completed by Fire Protection Consultant.
  - . Firesafety Inspection Report (E-5689) completed monthly (by Firesafety Director or Deputy Firesafety Director).
  - . Firesafety Inspection Report (E-5689) completed annually (by Firesafety Director, Deputy Firesafety Director, or accompanied by someone from building operations).
  - . Gas inspection and testing conducted annually.

#### HOUSEKEEPING-CLASSIFICATION NO. 2

- 5.02 General:
  - . Combustible trash removed from building daily.
  - . Rubbish outside of building at least 20 feet from any building opening.
  - Pipe chases, vertical shafts, stairwells, etc, clear of combustible materials.
  - . Metal wasce cans provided for disposal of paint rags, oil rags, wiping cloths, etc, emptied daily.
  - . Oil cleaning mops and rags kept in covered metal containers.
  - . Storerooms clean and orderly.
  - . Storage not in contact with heatproducing equipment.
  - . Elevator pits clean.
- 5.03 Storage and Handling of Flammable Liquids:
  - . Benzene, naptha, alcohol, terps and gasoline prohibited.
  - . Motor oil, automotive grease, diesel oils properly stored.
  - . Smoking and open flames prohibited in flammable liquid storage areas.
  - . Portable gas-powered machinery drained when stored within building.
  - . Paint in original containers, in storage cabinets.

### ELECTRICAL PROTECTION-CLASSIFICATION NO. 3

- 5.04 General:
  - Portable appliances, tools, and building equipment "Underwriter's Laboratory" (UL) listed.
  - . No frayed cords, loose wires.
  - . No electrical cords in contact with metallic or heat-producing surfaces.
  - . No open or broken lighting fixtures or other electrical appliances.
  - . No missing or broken coverplates for electrical boxes or outlets.
  - . Doors or covers to electrical distribution panels kept closed.
  - . No indications of overfusing or overheating.
  - . No electrical outlets overloaded.
  - . Portable electrical heating devices (hot plates, coffeepots, etc) provided with pilot lights.

### OCCUPANCY CONTROL-CLASSIFICATION NO. 4

- 5.05 General:
  - . Combustibles necessary for work operations stored on metal shelving.
  - . Packaging materials retained for future shipments enclosed in metal lockers.
  - . Scrap wire bags in metal containers.
  - . Ashtrays are the type with a lid which can extinguish smoking material.

- . No smoking rules enforced.
- . Fire doors kept closed.
- . Cable holes properly packed and sealed, certification seal intact.
- . Distributing frame slots and holes properly packed and sealed.
- . Sleeves, house telephone penetrations, etc, firestopped.
- . Construction areas policed.
- . Noncombustible, flameproofed furnishings, rated finishes, drapes treated.
- . Welding and cutting supervised, fire watch.

# PORTABLE FIRE EXTINGUISHERS-CLASSIFICATION NO. 5

- 5.06 General:
  - . Portable fire extinguishers easily located.
  - . Portable fire extinguishers sealed.
  - . Portable fire extinguishers maintained annually, on E-5962.
  - Portable water and CO<sub>2</sub> fire extinguishers hydrostatically tested every 5 years, dry chemical and Halon every 12 years, on E-5962.
  - . Dry chemical extinguishers recharged every 6 years, on E-5962.

### SECTION 770-310-901SW

### DETECTION SYSTEMS-CLASSIFICATION NO. 6

- 5.07 General:
  - . Fire detection system operating.
  - . One detector head/zone/semiannually tested.
  - . One pull box/zone activated semiannually.
  - . Control and annunicator panels maintained annually.
  - . Alarm devices inspected annually.
  - . Ventilation duct detectors cleaned annually.
  - . Detector heads on 4-year maintenance program.
  - . Routines and tests logged (Form SW-7376).

## SUPPRESSION SYSTEMS-CLASSIFICATION NO. 7

- 5.08 Standpipe and Sprinkler Systems:
  - . Siamese connection covers easily removed.
  - . Standpipe and sprinkler control valves sealed in wide open position.
  - . No standpipe or sprinkler valves leak.
  - . Standpipe and sprinkler piping maintained, logged.

- 5.09 Fire Pumps:
  - . Fire pumps run quarterly, logged.
  - . Fire pumps capacity tested annually, logged.
- 5.10 Hose Stations:
  - . Hose stations inspected annually, on E-5962.
  - . Lined fire hose hydrostatically tested every 5 years, on E-5962.
  - . Unlined hoses replaced after 12 years (open), 15 years (enclosed).
- 5.11 Special Systems:
  - . Fire extinguishing systems in kitchen routined semiannually per manufacturer's guidelines.
  - . CO<sub>2</sub> and Halon 1301 flooding systems routined annually.

# OTHER BUILDING SYSTEMS-CLASSIFICATION NO. 8

- 5.12 General:
  - . Kitchen hoods, grease filters, and ducts clean, cleaned regularly.
  - . Miscellaneous building penetrations firestopped.
  - . Fire dampers routined, locations marked.

- . Fire doors close and latch properly.
- . Fire shutters inspected annually, tested biannually, logged.
- . Building equipment alarms tested (firestats, boiler, etc), logged.

### EMERGENCY PREPAREDNESS-CLASSIFICATION NO. 9

- 5.13 Firesafety Plan:
  - . Firesafety Plan binder maintained, upto-date.
  - . Firesafety organization required, posted, up-to-date.
  - . Fire brigade organizational statement required, posted.
  - . Fire command station required.
  - . Written plan required, up-to-date.
  - . List of handicapped personnel, up-to-date.
  - . Fire emergency procedures posted.
  - . Evacuation Diagrams or Fire Protection Floor Plans posted.
  - . Fire Drills conducted semiannually.
- 5.14 Employee Safety:

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- . Personnel know locations of fire alarm pull boxes.
- . Employees trained in alarm response, procedures, responsibilities.

- . Employees familiar with types of fires and principles of extinguishment.
- . Employees know proper operation and use of the different types of portable extinguishers, standpipe and hose systems.
- . Exit and emergency lights maintained in working order.
- . Fire doors, exits unlocked.
- . Doorways, corridors, stairways, aisles, etc, free of obstructions.
- . BSAPP reviewed with management and craft personnel.
- 5.15 Firefighting Provisions:
  - . Free access to firefighting equipment.
  - . Free access to outside standpipe connections and hydrants.
  - . Fire department access openings not obstructed.
  - . Locations of emergency gas and water shutoff valves posted, wrenches available.
  - . Building and facilities reviewed annually with local fire department.
- 6. SUMMARY
- 6.01 The following is a summary of the overall inspection and quality measurement process.

- . Fill in the general data regarding the building on Form SW-6409.
- . Walk through the building, noting all deviations on the checklist.
- . Review the checklist, completing all spaces. (Ensure that all items are checked.)
- . Enter numerical ratings in the Quality Rating (Q.R.) column for all classifications rated.
- . Multiply each Q.R. by the assigned weighting factor (WF) and enter the resultant figure in the Quality Value (Q.V.) column.
- . Total the individual Q.V.'s and enter in Total Q.V. space.
- . Add the WF's of all classifications rated and enter in the Total W.F. space.
- . Divide the Total Q.V. by the Total W.F. and enter the result in the Quality Index space.
- . Enter in the Band space the alphabetical band (H,O,L, or U) which corresponds to the numerical Quality Index.
- . Note any unusual conditions.

EXHIBIT 1

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Retain 1 year, until Augurcuded (REF. B.S.P. 770-310-9015W)	ESA	FETY INS	PECTION	Date	16-1	83	
	r—	н	0		1		<u>u</u>
	Hi (	igher Than Objective	Objective Band	Lower Objec	Than tive	Unsa	tisfac Band
	10	0.0-9.6	9.5—9.0	8.9—	7.0	6 W	.9—(
					Q.H.	F	Q. 1
Building Name SANDY VALLEY #2555		Haveakaa			9.3	1.0	9.3
Address 123 OAK STREET	2	HOUSEKee	ping		9.3	1.5	13.9
City & State ANTOWN, U.S.A.	3	Electrical	Protection		9.0	0.5	4.
Geo. Loc. Code XX0000	4	Occupant	cy Control	· · · · · · · · · · · · · · · · · · ·	9.1	1.5	13.
Sector/Zone // WEST	5	Portable F	Fire Extinguish	ers	9.5	1.0	9.
No. Fis. 1 + 05MT Cl. Grp	6	Detection	Systems		9.5	1.5	14
Bldg. [1]2	7	Suppress	on Systems		NA	1.0	N/
Population	8	Other Bui	Iding Systems		9.5	1.0	9.
	9	Emergeno	y Preparednes	s	9.5	1.0	0
Q.R. — Quality Rating (Use Tenths) Q.V. — Quality Value (Use Hundredths) W.F. — Weighting Factor			ſ	IOTAL W	F. 9	7.0	
QUALITY INDEX = $\frac{TOTA}{TOTA}$ Note Any Unit	IL Q IL W	$\frac{V}{VF} = 9$	<b>4</b> BAND	0			

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	BUILDING FIRESAFETY CHECKLIST Check Items As Indicated				
Bidg. SANDY VALLEY	#2E55	ntus (~ Dev., OK, N/A) Floor			
1. INSPECTIONS	STATUS	NOTES, LOCATION, ETC.			
.01 General	$\rightarrow$				
Fire Consultant Report Available	OK				
Bidg. Oper. Items Complete	OK				
E-5689 Completed Monthly	OK				
Annually With Bldg. Oper.	OK				
Gas Testing Conducted	1	GAS TEST 2 MAS LATE			
2. HOUSEKEEPING	STATUS				
.01 General	$\rightarrow$				
Comb. Trash Removed	oK				
Rubbish Outside 20 Ft.		CARDBOARD BOLES STACKED AT REAR EXI			
Shafts, Stairwells Clear Of Comb.	OK				
Paint, Oil, Rag Cont., Emptied	OK				
Storerooms Clean & Orderly	OK				
No Heat Contact Storage	OK				
Elevator Pits Clean	N/A				
.02 Storage & Handling Of	$\rightarrow$				
Flammable Liquids	$\sim$				
Flamm, Liquids Prohibited	OK				
Comb. Liquids Stored	OK				
No Smoking, Flames In Storage	OK				
Port. Gas Machinery Drained	CK				
Paint In Containers, Cabinets	OK				
3. ELECTRICAL PROTECTION	STATUS				
.01 General	$\sim$				
Appl., Tools, Equip. UL Listed	OK				
No Frayed Cords, Loose Wires	OK				
No Contact Metal Or Heat	OK	· · · · · · · · · · · · · · · · · · ·			
No Open Or Broken Fixt., Appl.	1	I LIGHT FIXTURE - MEN'S RM IST FLR			
No Missing Or Broken Covers	11	2 SOUTH WALL - BSMT			
Elec. Distribution Panels Closed	OK				

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# EXHIBIT 1 (Continued)

Page 2				
4. OCCUPANCY CONTROL	STATUS	1	NOTES, LOCATION, ETC.	
.01 General	$\geq$			
Necessary Comb. Stored	OK			
Packaging In Metal Lockers	OK			
Scrap Wire In Metal Containers	OK			
Approved Ashtrays	OK			
No Smoking Rules Enforced	1	EVIDENCE	OF SMOKING IN C.O.	
Fire Doors Kept Closed	<b>V</b>	I PROPPED	OPEN TO LOUNGE	
Cable Holes Packed, Sealed	oK			
Cable Holes Certified	OK		· · · · · · · · · · · · · · · · · · ·	
DF Openings Packed, Sealed	OK			
Sleeves, Penetrations Firestopped	OK			
Gonstruction Areas Policed	N/A			
Rated Furnishings, Finishes	OK			
Drapes Treated	NIA			
Welding, Cutting Supervised	NIA			
5. PORTABLE FIRE EXTINQUISHERS	STATUS			
.01 General	$\geq$		- · · · · · · · · · · · · · · · · · · ·	
Easily Located	OK			
Sealed	OK			
Maintained, On E-5962	OL			
Hydrostatically Tested, On E-5962	OK			
Dry Chem., Halon Recharged, On E-5962	NA			
6. DETECTION SYSTEMS	STATUS			
.01 General	$\geq$			
Operating	OK			
One Head/Zone/Semiannually Tested	OK			
One Pull Box/Zone Activated Semiannually	OK			
Control, Ann. Panels Maintained	<u>ok</u>			
Alarm Devices Inspected	OK			
Duct Detectors Maintained	OK			
Detector Mtce. Program	OK			
Routines, Tests Logged	DK			

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EXHIBIT 1 (Continued)

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			Page
7. SUPRESSION SYSTEMS	STATUS	NOTES, LOCATION, ETC.	
01 Standpipe And Sprinkler Systems			
Siamese Cov. Removable	NIA		
Valves Sealed	Ň		
No Valves Leak			
Piping Maintained	M .		
.02 Fire Pumps	$\geq$		
Run Quarterly	N/A		
Capacity Tested	5		
.03 Hose Stations	$\searrow$		
Inspected, On E-5962	NA	_	
Lined Hydro Tested, On E-5962			
Unlined Replaced	Ψ.		
.04 Special Systems	$\geq$		
Kitch, Fixed Pipe Ext, Insp.	N/A	······································	
CO2, Halon Routined	11		
8. OTHER BLDG. SYSTEMS	STATUS		
.01 General			
Kitchen Vent Clean	N/A		
Bidg. Penetrations Firestopped	BL	· · · · · · · · · · · · · · · · · · ·	
Fire Dampers Routined	OK		
Fire Doors Close, Latch	OK	· · · · · · · · · · · · · · · · · · ·	
Fire Shutters Insp., Tested	<u> </u>		
Bldg. Equip. Alarms Tested	OK		

NOTES:

# EXHIBIT 1 (Continued)

Page 4		
9. EMERGENCY PREPAREDNESS	STATUS	NOTES, LOCATION, ETC.
.01 Firseafety Plan	$\sim$	
Binder Maintained	NA	
Organization Reg'd., Posted	NIA	
Statement Reg'd, Posted	NIA	
Command Station Reg'd.	NIA	
Written Plan Req'd.	A/A	
Handicapped List	N/A	
Emerg. Procedures Posted	ÓK	
Drawings Req'd., Posted	OK	
Fire Drills Conducted	OK	
.02 Employee Safety		
Personnel Know Pull Boxes	OK	
Alarm Response	OK	
Principles Of Extinguishment	OK	
Oper. Ext./Standpipe	OK	
Exit, Emerg. Lts. Maintained	OK	
Fire Doors, Exits Unlocked	OK	
Doors, Corr., Aisles, Etc. Free	OK	·····
BSAPP Reviewed	OK	
.03 Firefighting Provisions	$\rightarrow$	
Free Access Equipment	OK	
Free Access Outside Conn.	<u> </u>	<u> </u>
F.D. Access Openings Free	OK	
Loc. Gas/Water Shutoffs	<u> </u>	
Facilities Reviewed	OK	

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