

ED 025 142

By- Wakefield, Howard E.

Safety Factors in Educational Facilities. An Annotated Reference List.

Wisconsin Univ., Madison. ERIC Clearinghouse on Educational Facilities.

Spons Agency- Office of Education (DHEW), Washington, D.C.

Pub Date Nov 68

Note- 31p.

EDRS Price MF-\$0.25 HC-\$1.65

Descriptors- \*Accident Prevention, \*Annotated Bibliographies, Design Needs, \*Educational Facilities, Educational Planning, Environmental Influences, Facility Guidelines, Physical Design Needs, \*Safety, Safety Equipment, School Construction, \*School Safety, Traffic Safety

Abstracts and descriptor terms are presented for 26 selected references with safety orientation. Included in addition to several general planning handbooks are topics related to--(1) stairways, (2) air structures, (3) site planning, (4) lighting, (5) bidding practice, (6) physically handicapped, (7) laboratory design, (8) mobile classrooms, (9) fallout protection, and (10) fire protection. (MH)

CLEARINGHOUSE ON  
EDUCATIONAL  
FACILITIES

**ERIC CEF**

EDUCATIONAL RESOURCES INFORMATION CENTER • 606 STATE STREET, ROOM 314 • MADISON, WIS. 53703

SAFETY FACTORS IN EDUCATIONAL FACILITIES

An Annotated Reference List

EF 002674

ED025142

This publication was prepared pursuant to a contract with the Office of Education, U. S. Department of Health, Education and Welfare. Points of view or opinions expressed herein do not necessarily represent official Office of Education position or policy.

SAFETY FACTORS IN EDUCATIONAL FACILITIES

An Annotated Reference List

Prepared By

Howard E. Wakefield

Director

ERIC Clearinghouse on Educational Facilities

The University of Wisconsin

Madison

November, 1968

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE  
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

## FOREWORD

ERIC/CEF is a clearinghouse of information about sites, buildings, and equipment used for educational purposes; included are the efficiency and effectiveness of activities such as planning, financing, constructing, renovating, maintaining, operating, insuring, utilizing, and evaluating educational facilities.

ERIC/CEF is part of a network of national clearinghouses covering many fields of educational research. The information from all these clearinghouses is reported monthly in RESEARCH IN EDUCATION (RIE), a publication of the U.S. Government Printing Office (annual subscription: Domestic, \$21.00, Foreign \$26.25).

Many of the documents reported in RIE are available from the ERIC Document Reproduction Service. This service is currently provided by the National Cash Register Company, 4936 Fairmont Avenue, Bethesda, Maryland 20014. Individual documents may be obtained on microfiche at 25¢ for each 60 pages or fewer. Facsimile documents are available at 4¢ per page. Standing orders of all documents related to certain topics are available at 8.4 cents per fiche.

These references are drawn from the documents received and processed to date by ERIC/CEF. They are not represented as a comprehensive list of information on the subject. However, many of the documents are not widely circulated and are therefore useful in expanding existing information. All documents listed herein with an ED number (see symbol page) are available from EDRS. The remaining documents should be sought through the indicated publisher or distributor (the institution source or the information provided at the end of the abstract).

ERIC/CEF invites you to submit documents which are related to the activities described in the first paragraph above.

	Clearinghouse Accession No.	ERIC Document No. (Available from EDRS)	Clearinghouse Information Code	
Title				
Author(s)	EF 001 080	ED 016 359	CERS 2	
Institution Source	THE INSTRUCTIONAL MATERIALS CENTER			
Date Published	BY- KLOSTER, ALEXANDER J. MICHIGAN DEPARTMENT OF EDUCATION, LANSING			
Report No. or Journal Citation	PUBLISHED- 65 IN- BULLETIN NO. 369			
Pagination	071 PAGES			
	DESCRIPTORS- *AUDIOVISUAL AIDS, *INSTRUCTIONAL MATERIALS, *INSTRUCTIONAL MATERIALS CENTERS, *LIBRARIES, CARRELS, INDIVIDUAL STUDY, STUDY FACILITIES			Index Terms (Major terms are preceded by an asterisk)
Abstract	THIS BULLETIN PRESENTS RECOMMEND- ATIONS WITH REGARD TO PROGRAM, PERSONNEL, AND FACILITIES FOR AN INSTRUCTIONAL MATERIALS ORGANIZ- ATION AND LAYOUTS FOR AN INSTRUCT- IONAL MATERIALS CENTER. CASE STUDIES AND EXAMPLES ARE PROVIDED FOR MAKING THE MAXIMUM POSSIBLE USAGE OF THE CENTER WITHIN BOTH THE SCHOOL AND THE COMMUNITY. (BD)			

ANNOTATED REFERENCES

A STUDY OF THE FEASIBILITY OF PROVIDING STATE SCHOOL BUILDING FUNDS FOR RENOVATION OR MODERNIZATION OF SCHOOL BUILDINGS AND OTHER SCHOOL FACILITIES

WASHINGTON STATE BOARD OF EDUCATION, OLYMPIA

PUBLISHED- 63

REPORT/SERIES NO.- RR-09-01

041 PAGES

DESCRIPTORS- \*SCHOOL MODERNIZATION, \*BUILDING EVALUATION, \*ARCHITECTURAL DESIGN, COST, SANITATION, SCHOOL LOCATION, SAFETY, CITY PLANNING, PROGRAM SANITATION

THIS REPORT INCLUDES GUIDELINES FOR THE MODERNIZATION OF SCHOOLS TO REPLACE SUBSTANDARD CLASSROOMS. THE CONCLUSIONS WERE THAT IF MODERNIZATION COSTS DO NOT EXCEED 20 TO 40 PERCENT OF THE COST OF NEW OR REPLACEMENT CONSTRUCTION MODERNIZATION IS FEASIBLE. VARIABLES MEASURED IN MODERNIZATION DECISIONS INCLUDE SITE, TYPE OF INTERIOR AND EXTERIOR CONSTRUCTION, AND THE NUMBER OF TEACHING STATIONS. THE TEACHING STAFF NEEDS TO CORRELATE EDUCATIONAL CHANGES WITH PROPOSED BUILDING CHANGES, BUILDING CHANGES MUST BE REVIEWED IN COORDINATION WITH THE LOCAL PLANNING COMMISSION, FIRE AND HEALTH OFFICIALS, ENGINEERING OFFICE, AND ARCHITECTURAL SERVICES. FROM SUCH INVESTIGATION A MODERNIZATION COST SCHEDULE CAN BE DEvised TO FACILITATE A MODERNIZATION DECISION. AN INCIDENTAL CONSIDERATION TO THIS WASHINGTON STUDY WAS A FORMULA FOR STATE AID FOR MODERNIZATION COSTS AND A STATEMENT OF THE ROLE OF THE STATE EDUCATIONAL DEPARTMENT IN MODERNIZATION SHOULD IMPROVE THE SAFETY, SANITATION CONDITIONS, AND THE EDUCATIONAL ADEQUACY. THE AUTHORS CONCLUDED THAT MODERNIZATION DOES NOT REDUCE OVERCROWDED CONDITIONS OR PROVIDE ADDITIONAL SPACES FOR INCREASED ENROLLMENTS. HOWEVER, MODERNIZATION WILL DELAY REPLACEMENT OF CERTAIN BUILDINGS FOR A NUMBER OF YEARS AND IN SOME INSTANCES SOME ECONOMY CAN BE REALIZED. THE APPENDIX INCLUDES THE PRELIMINARY MODERNIZATION SURVEY INSTRUMENT DEVELOPED IN THE WASHINGTON PROGRAM.

PROVIDING A HEALTHFUL SCHOOL ENVIRONMENT

BY- JOHANNIS, NORMA AND DOSTER, MILDRED AND COCHRANE, ROBERT  
COLORADO STATE DEPARTMENT OF EDUCATION, DENVER

PUBLISHED- 62

017 PAGES

DESCRIPTORS- \*CLASSROOM ACTIVITIES, \*HEALTH CONDITIONS, \*PHYSICAL ENVIRONMENT, \*PHYSICAL FACILITIES, \*STANDARDS, EVALUATION, FINE ARTS, FIRE PROTECTION, HEATING, HOME ECONOMICS, ILLUMINATION, INDUSTRIAL ARTS, SAFETY, SANITATION, SCHOOL BUILDINGS, SCHOOL LOCATION, SCIENCE, SOCIAL STUDIES, VENTILATION

THIS REPORT DISCUSSES STANDARDS AND PROCEDURES AS APPLIED TO MENTAL AND PHYSICAL HEALTH AND SAFETY AS AFFECTED BY THE PHYSICAL SURROUNDINGS. A BIBLIOGRAPHY DESCRIBING STANDARDS AND SUGGESTED PROCEDURES, AND A CHECKLIST, ARE PROVIDED FOR VOLUNTARY SELF APPRAISAL. THE CHECKLIST COVERS (1) THE SCHOOL GROUNDS, (2) THE SCHOOL BUILDING, (3) ILLUMINATION, (4) HEATING AND VENTILATION, (5) WATER SUPPLY, (6) TOILET FACILITIES AND WASTE DISPOSAL, (7) FIRE AND SAFETY, (8) CLASSROOMS, AND (9) KITCHEN AND LUNCHROOM. THE CHECKLIST INCLUDES BOTH PHYSICAL SPECIFICATIONS AND PERFORMANCE CRITERIA. SUGGESTIONS ARE ALSO GIVEN FOR STUDENT AND TEACHER PARTICIPATION AND CLASSROOM ACTIVITIES RELATED TO ENVIRONMENTAL HEALTH. (MM)



OPTIMUM DIMENSIONS FOR DOMESTIC STAIRWAYS A PRELIMINARY STUDY

BY- WARD, JOAN S.

PUBLISHED-JUL 67  
IN- RESEARCH, JULY, 1967

008 PAGES

DESCRIPTORS- \*STAIRWAYS, ENVIRONMENTAL RESEARCH, EQUIPMENT DESIGN, PERFORMANCE CRITERIA, RESEARCH, SAFETY

A STUDY TO DETERMINE OPTIMUM TREAD AND RISE FOR DOMESTIC STAIRWAYS WAS MADE BY THE DEPARTMENT OF ERGONOMICS AND CYBERNETICS OF LOUGHBOROUGH UNIVERSITY OF TECHNOLOGY AND THE RESEARCH AND DEVELOPMENT GROUP OF M.O.H.L.G. FORTY FIVE SUBJECTS BETWEEN THE AGES OF SIXTY TWO AND SEVENTY EIGHT WERE TESTED ON TWO STAIRWAYS WITH ADJUSTABLE TREAD AND RISE. THE STUDY USED THREE APPROACHES--(1) PHYSIOLOGICAL, IN WHICH PULSE RATE WAS RECORDED AS A MEASURE OF ENERGY EXPENDED, (2) PHYSICAL, IN WHICH MULTIPLE PHOTOGRAPHS RECORDED THE SUBJECT'S PHYSICAL RELATIONSHIP TO THE STAIRWAY, AND (3) PSYCHOLOGICAL, IN WHICH THE SUBJECT GAVE HIS JUDGMENT ON THE EASE, COMFORT, AND SAFETY OF EACH STAIRWAY.  
(JT)

## AIR STRUCTURES FOR SCHOOL SPORTS

BY- ROBERTSON, NAN  
EDUCATIONAL FACILITIES LABORATORIES, INC., NEW YORK, N. Y.

PUBLISHED- 64

28 PAGES

DESCRIPTORS- \*AIR STRUCTURES, \*PHYSICAL EDUCATION FACILITIES, \*PREFABRICATION, ATHLETIC ACTIVITIES, CONSTRUCTION COSTS, COSTS, MAINTENANCE, SAFETY, SCHOOL CONSTRUCTION, SCHOOL MAINTENANCE, SCHOOL SAFETY

AIR STRUCTURES ARE FABRIC BUILDINGS BLOWN UP AND HELD UP BY AIR PRESSURE. EXPERIMENTS WITH SUCH STRUCTURES WERE CONDUCTED AS EARLY AS 1917. IN 1948 THE UNITED STATES AIR FORCE SOUGHT A NEW WAY OF HOUSING LARGE RADAR ANTENNAE PLANNED FOR THE ARCTIC. AS AN OUTCOME OF THEIR SEARCH, BIRDAIR STRUCTURES, INC., WHICH IS NOW ONE OF SEVERAL COMPANIES SELLING SUCH STRUCTURES, WAS FOUNDED. EARLY EXPERIENCES WITH AIR STRUCTURES FOR SCHOOLS IN LITCHFIELD, CONNECTICUT, WERE DISAPPOINTING. THE SUBSEQUENT ERECTION OF TWO MORE BUBBLES WAS EVIDENCE THAT SATISFACTION WAS EVENTUALLY ACHIEVED. COST ESTIMATES OF \$2.14 PER SQUARE FOOT COMPARE FAVORABLE WITH WOOD-DOMED FIELDHOUSES AT \$6.53 PER SQUARE FOOT OR GEODESIC FIELDHOUSES AT \$8.34 PER SQUARE FOOT. COSTS FOR SWIMMING POOL USE ARE ESTIMATED AT \$9.38 PER SQUARE FOOT AS COMPARED TO \$26.00 AND \$32.00. EASE OF HEATING IS ALSO EMPHASIZED. INSTALLATION TIME IS APPROXIMATELY ONE DAY. THERE IS NO DANGER OF SUFFOCATION IN CASE OF DEFLATION BECAUSE THE PROCESS IS SLOW AND THE MATERIAL CAN EASILY BE LIFTED SHOULD ONE FIND IT NECESSARY TO GET OUT UNDER SUCH CONDITIONS. THERE IS NO FIRE DANGER. BECAUSE OF A HIGH REFLECTION SURFACE, LIGHTING PROBLEMS ARE MINIMAL. CURRENT EXPERIMENTS ARE BEING CARRIED OUT TO MAKE IMPROVEMENTS. INTERESTED READERS MAY SEE SUGGESTED DO'S AND DON'TS BY REFERRING TO THIS BOOKLET. ADVANTAGES OF AIR STRUCTURES ARE COST, HEATING EASE, LIGHTING EASE, UNOBSTRUCTED AREA, PORTABILITY, MAINTENANCE, AND DEPENDABILITY. THE MAIN DISADVANTAGE IS THE LIMITED LIFE EXPECTANCY. THIS DOCUMENT IS AVAILABLE FROM EDUCATIONAL FACILITIES LABORATORIES, INC., 477 MADISON AVENUE, NEW YORK, N.Y. 10022. (RH)

QUESTION--WHAT MAKES A SCHOOL SITE SAFE ANSWER--DEFINITE PLANNING

BY- GEORGE, N. L. AND GILLILAND, SR., LONNIE  
ASSOCIATION OF SCHOOL BUSINESS OFFICIALS OF THE UNITED STATES AND  
CANADA, CHICAGO, ILLINOIS

PUBLISHED-APR66

IN- SCHOOL BUSINESS AFFAIRS, VOL. 32, NO. 4

6 PAGES

DESCRIPTORS- \*PARKING AREAS, \*SCHOOL LOCATION, \*STUDENT  
TRANSPORTATION, \*TRAFFIC REGULATION, \*TRAFFIC SAFETY, PARENT  
SCHOOL RELATIONSHIP, PLAYGROUNDS, SCHOOL PLANNING, STANDARDS,  
STUDENT LOADING AREAS

TWO STAFF MEMBERS FROM A SYSTEM OF PUBLIC SCHOOLS, THE  
ASSISTANT SUPERINTENDENT, AND THE DIRECTOR OF SAFETY EDUCATION  
DISCUSSED THE PROBLEMS OF TRAFFIC SAFETY ON AND AROUND THE SCHOOL  
SITE. FACTORS WHICH WERE CONSIDERED INCLUDE--(1) SCHOOL SITE AND  
BUILDING LOCATION, (2) SAFETY REQUIREMENTS, PRACTICES AND  
PRINCIPLES, (3) SIDEWALK DESIGN AND LOCATION, (4) PARKING AND  
DRIVEWAYS, (5) FENCING, AND (6) PARENT EDUCATION. SPECIFIC  
RECOMMENDATIONS INCLUDED (1) LOCATING THE BUILDING ON A CORNER OF  
THE SITE, (2) LIMITING ACCESS TO TWO SIDES OF THE SITE, (3)  
REGULATING STREET PARKING AND CROSSWALKS, (4) SEPARATING  
PEDESTRIAN AND VEHICULAR TRAFFIC, (5) FORMULAS FOR DETERMINING  
FACULTY AND STUDENT PARKING NEEDS, AND (6) PROVIDING PARENTS WITH  
THE TRAFFIC PLAN. THIS DOCUMENT IS AVAILABLE FROM THE ASSOCIATION  
OF SCHOOL BUSINESS OFFICIALS OF THE UNITED STATES AND CANADA,  
CHICAGO, ILLINOIS. (DM)

GUIDE FOR THE EVALUATION OF SCHOOL FACILITIES

CALIFORNIA ASSOCIATION PUBLIC SCHOOL BUSINESS OFFICIALS,  
PRESENTED BY THE SOUTHERN SECTION BUILDING COMMITTEE

PUBLISHED-APR66

62 PAGES

DESCRIPTORS- \*FACILITY GUIDELINES, \*ENVIRONMENTAL INFLUENCES,  
\*EVALUATION METHODS, \*PHYSICAL ENVIRONMENT, \*SCHOOL CONSTRUCTION,  
ACOUSTICAL ENVIRONMENT, AUDIOVISUAL AIDS, EQUIPMENT, HEATING,  
MAINTENANCE, SAFETY, SCHOOL BUILDINGS, SCHOOL PLANNING, SPATIAL  
RELATIONSHIP, VISUAL ENVIRONMENT

THE SCHOOL EVALUATION GUIDE IS DESIGNED TO PROVIDE WORKABLE  
CRITERIA FOR APPRAISAL OF THE PHYSICAL CHARACTERISTICS OF  
EXISTING SCHOOL PLANTS. INFORMATION OBTAINED FROM THE GUIDE CAN  
BE USED FOR THE PURPOSE OF SEEKING OUT UNSATISFACTORY BUILDING  
FEATURES AND TO STIMULATE IMPROVEMENTS IN FUTURE SCHOOL  
CONSTRUCTION. WITH THIS EVALUATION PROCEDURE, SCHOOL  
ADMINISTRATORS AND ARCHITECTS CAN DETERMINE DEFICIENT  
CHARACTERISTICS IN A SCHOOL AND THE STEPS TO BE TAKEN IN  
CORRECTING THEM. SECTION PROFILES HAVE BEEN INCLUDED IN THIS  
CRITERIA FOR THE SITE--SPATIAL, VISUAL, THERMAL, SONIC, AESTHETIC,  
AUDIO-VISUAL, EQUIPMENT, SAFETY, AND MAINTENANCE FACTORS. THE  
SECTION PROFILES HAVE BEEN DEVELOPED TO PERMIT A MORE DETAILED  
EVALUATION FOR EACH OF THE FACTORS THAT ARE TREATED UNDER THE  
SAME FORMAT CONTAINING A BRIEF DESCRIPTIVE PARAGRAPH, A SET OF  
QUESTIONS RELATIVE TO SPECIALIZED ASPECTS OF THE FACTOR, AND AN  
EVALUATION PROFILE FORM. THE FINAL SECTION OF THE GUIDE A SERIES  
OF QUESTIONNAIRES TO BE SUBMITTED TO GROUPS OF TEACHERS,  
PRINCIPALS, STUDENTS, AND DISTRICT ADMINISTRATORS. THESE  
QUESTIONNAIRES SUPPLEMENT DATA GATHERED ON SONIC, THERMAL, AND  
VISUAL FACTORS. THIS EVALUATION GUIDE REPRESENTS THE EFFORT OF  
SCHOOL PLANNERS, ADMINISTRATORS, ARCHITECTS, AND ENGINEERS WHO  
HAVE CONTRIBUTED THEIR TIME TO THE CAUSE OF BETTER SCHOOL  
PLANNING. IT IS IN EXPERIMENTAL FORM AND THROUGH PERIODIC USE, A  
FINAL GUIDE WILL BE DEVELOPED. (RK)

SCHOOL LIGHTING

GENERAL ELECTRIC, CLEVELAND, OHIO

PUBLISHED-SEP64

016 PAGES

DESCRIPTORS- \*ECONOMICS, \*ILLUMINATION LEVELS, \*LIGHTING, \*SCHOOL ENVIRONMENT, \*VISUAL ENVIRONMENT, ATHLETICS, AUDITORIUMS, AUDIOVISUAL AIDS, CLASSROOMS, CORRIDORS, MULTIPURPOSE CLASSROOMS, SAFETY, TELEVISION

THIS REPORT DEALS WITH PLANNING FOR EFFECTIVE LIGHTING IN SCHOOLS. TOPICS DISCUSSED ARE--(1) ECONOMICS, (2) ELECTRICAL SPACE CONDITIONING, (3) DEVELOPING THE VISUAL ENVIRONMENT, (4) BRIGHTNESS RELATIONSHIPS, (5) LEVELS OF ILLUMINATION, (6) IMPROVED LAMPS, (7) QUALITY IN LIGHTING, (8) LUMINARIES AND VISUAL COMFORT, (9) THE VISUAL COMFORT INDEX, AND (10) CAUSES AND REDUCTION OF CEILING REFLECTIONS. SECTIONS ARE ALSO INCLUDED ON LIGHTING IN CLASSROOMS, FOR AUDIOVISUAL AIDS, FOR TELEVISION IN THE CLASSROOM, FOR AUDITORIUMS AND MULTI-PURPOSE ROOMS, FOR INDOOR AND OUTDOOR SPORTS, FOR CORRIDORS, AND FOR NIGHTTIME PROTECTION OF PEOPLE AND PROPERTY. PHOTOGRAPHS, CHARTS, AND DIAGRAMS ACCOMPANY THE TEXT. (RK)

EDUCATIONAL SPECIFICATIONS FOR HAHAIONE ELEMENTARY SCHOOL  
(DEVELOPED FROM THE PROGRAM DELINEATION STUDY JANUARY - APRIL  
1961)

HAWAII STATE DEPARTMENT OF EDUCATION, HONOLULU

PUBLISHED- 61

094 PAGES

DESCRIPTORS- \*EDUCATIONAL PLANNING, \*EDUCATIONAL SPECIFICATIONS,  
\*ELEMENTARY SCHOOLS, \*SCHOOL PLANNING, ART, ART EDUCATION,  
CREATIVITY, EDUCATIONAL FACILITIES, ELEMENTARY EDUCATION, FAMILY  
LIFE, GIFTED, GUIDANCE, HEALTH, INDUSTRIAL ARTS, LANGUAGE ARTS,  
PHYSICAL EDUCATION, PLANNING, SAFETY, SCHOOL DESIGN, SCIENCE

A COMPREHENSIVE SURVEY OF HAWAII'S PUBLIC SCHOOL SYSTEM HIGHLIGHTED EXISTING PROBLEMS AND RECOMMENDED SOLUTIONS. THE STIMULATION PROVIDED BY THIS SURVEY RESULTED IN A GRANT FROM EDUCATIONAL FACILITIES LABORATORIES TO CHANGE SCHOOL FACILITIES CONSTRUCTION IN HAWAII. A RESULT OF THIS GRANT WAS A PROGRAM DELINEATION STUDY SET UP JOINTLY BY THE DEPARTMENT OF EDUCATION AND EFL. CURRICULUM SPECIALISTS AND SELECTED PRINCIPALS AND TEACHERS STUDIED, DISCUSSED, AND GAINED NEW INSIGHTS INTO NEWER EDUCATIONAL METHODS. NINETEEN SUBCOMMITTEES REPRESENTING THE MAJOR SUBJECT AND PROGRAM AREAS BEGAN AN INTENSIVE STUDY TO SEE THE MAJOR POSSIBLE UTILIZATION OF THE NEWER CONCEPTS PRESENTED TO THEM. THE SUBCOMMITTEES SUBMITTED THEIR REPORTS TO THE ELEMENTARY AND SECONDARY PROGRAM DELINEATION STUDY COMMITTEES. THESE TWO MAJOR COMMITTEES HAD RESPONSIBILITY TO DEVELOP PATTERNS FOR INITIATING AND IMPLEMENTING THE NEWER INSTRUCTIONAL PROGRAM FOR HAWAII. FROM THESE EFFORTS EDUCATIONAL SPECIFICATIONS WERE DERIVED WHICH WERE SUBMITTED TO THE COMMISSIONERS OF PUBLIC INSTRUCTION. THE COMMISSIONERS ACCEPTED THESE RECOMMENDATIONS AND GRANTED APPROVAL TO IMPLEMENT THEM IN THE PLANNING AND DESIGNING OF TWO NEW SCHOOLS. THIS REPORT CONTAINS THE EDUCATIONAL SPECIFICATIONS FOR THE HAHAIONE VALLEY AREA.

ERIC/CEF DOCUMENT NO. EF000620

DISPOSITION-EDC- 2

FIRE ESCAPES AND STAIR TOWERS FOR EXISTING SCHOOLS

STATE UNIVERSITY OF NEW YORK, ALBANY

IN- , I 139R-MR61-1500(46090)

005 PAGES

DESCRIPTORS- \*FIRE SAFETY, \*SCHOOL SAFETY, SAFETY, SCHOOL DESIGN

THIS DOCUMENT BRIEFLY GIVES INFORMATION ON THE USE,  
LOCATION AND SPECIFICATIONS FOR SCHOOL FIRE ESCAPES. (JT)

HANDBOOK ON PLANNING SCHOOL FACILITIES

BY- SMITH, REX M.  
WEST VIRGINIA STATE DEPARTMENT OF EDUCATION, CHARLESTON, DIVISION  
OF SCHOOL PLANT PLANNING

IN- SUPPLEMENTING GUIDE FOR PLANNING SCHOOL PLANTS

115 PAGES

DESCRIPTORS- \*EDUCATIONAL PLANNING, \*SCHOOL PLANNING, AUDIO  
VISUAL CENTERS, AUDIOVISUAL PROGRAMS, EDUCATIONAL FACILITIES,  
EDUCATIONAL SPECIFICATIONS, ELEMENTARY SCHOOLS, HIGH SCHOOLS,  
MASTER PLANS, SANITATION, SAFETY, SCHOOL BUILDINGS, SCHOOL  
DESIGN, SCHOOL FACILITIES, SCHOOL LOCATION, SCHOOL PLANT,  
SECONDARY SCHOOLS

DEVELOPMENT OF A SCHOOL PLANT PROGRAM IS A PRIMARY  
RESPONSIBILITY OF THE BOARD OF EDUCATION. EDUCATIONAL NEEDS  
ANALYSES, PLANT SURVEYS, SITE SELECTION CRITERIA, EDUCATIONAL  
SPECIFICATIONS, AND CAREFUL DESIGNING ARE ALL ESSENTIAL TO THE  
PROGRAM. SITE CONSIDERATIONS ARE LOCATION, SIZE, PHYSICAL  
FEATURES, RECREATIONAL AREAS, WALLS, DRIVES, PARKING, AND  
BEAUTIFICATION. SPECIFIC ATTENTION TO THE NEEDS OF THE PUPILS TO  
BE SERVED IN A NEW PLANT MUST BE GIVEN. ELEMENTARY CENTERS MUST  
MAKE SPECIAL PROVISION FOR KINDERGARTENS AND SUCH SPECIAL AREAS  
AS ART, MUSIC, PHYSICAL EDUCATION, AND LIBRARY. SPECIAL ATTENTION  
MUST BE GIVEN TO BUSINESS EDUCATION, INDUSTRIAL ARTS, MUSIC,  
PHYSICAL EDUCATION, SCIENCE, AGRICULTURE, LIBRARY, AND  
ADMINISTRATIVE FACILITIES IN SECONDARY SCHOOLS. EVERY FACILITY  
MUST PROVIDE STRUCTURAL, FIRE, AND TRAFFIC SAFETY. SANITARY,  
AUDIOVISUAL, CUSTODIAL, ALARM, AND STORAGE FACILITIES ALSO  
REQUIRE CAREFUL ATTENTION IN NEW PLANTS. THERMAL, VISUAL, SONIC  
AND AESTHETIC ENVIRONMENTAL FACTORS REQUIRE CAREFUL PLANNING FOR  
PROPER LEARNING CLIMATE. WEST VIRGINIA STATE CODE REFERENCES ARE  
FURNISHED AS WELL AS SUGGESTIONS ABOUT UTILIZATION OF  
ARCHITECTURAL SERVICES.



ELEMENTS ON GOOD BIDDING PRACTICES

BY- SCHWARTZ, CLEM  
AMERICAN SCHOOL BOARD JOURNAL, MILWAUKEE, WISCONSIN

PUBLISHED-MAY66  
IN- AMERICAN SCHOOL BOARD JOURNAL, MAY 66, PP. 36-37

25 PAGES

DESCRIPTORS- \*ARCHITECTS, \*BIDDING SPECIFICATIONS, \*ENGINEERS,  
\*SCHOOL PLANNING, CONTRACTS, EDUCATIONAL FINANCE, ENGINEERING,  
FINANCIAL POLICY, PROFESSIONAL PERSONNEL, SAFETY, SCHOOL  
CONSTRUCTION, SCHOOL DESIGN

EMPLOYMENT OF AN ARCHITECT WHO WILL DRAW UP PLANS AND SUBMIT  
PRELIMINARY SKETCHES IS THE FIRST STEP IN THE BIDDING PROCEDURE.  
THE ARCHITECT USUALLY WORKS WITH A CONSULTING ENGINEER. AFTER  
APPROVAL OF PRELIMINARY PLANS, THE ENGINEER WILL ESTABLISH  
SPECIFICATIONS FOR MECHANICAL EQUIPMENT AND DRAW PLANS  
ACCORDINGLY. WHEN THIS PHASE IS COMPLETED THE JOB IS READY TO GO  
TO BID. IT IS RECOMMENDED THAT A MECHANICAL CONTRACTOR BE  
CONTACTED. BASE BIDS WITH ALTERNATES SHOULD BE SOUGHT. FINAL  
AUTHORITY IN SELECTING THE BID OR THE ALTERNATE SHOULD REST WITH  
THE ENGINEER. BIDDERS SHOULD BE REQUIRED TO ESTABLISH FINANCIAL  
RESPONSIBILITY. THIS ARTICLE APPEARED IN THE MAY, 1966 ISSUE OF  
AMERICAN SCHOOL BOARD JOURNAL. COPIES MAY BE OBTAINED FROM THE  
EDITOR, BRUCE PUBLISHING CO., 400 N. BROADWAY, MILWAUKEE,  
WISCONSIN 53211. (RH)

PREPARATION OF BIDDING DOCUMENTS AND AWARDING OF CONTRACTS

BY- PORTER, JOHN D.  
ASSOCIATION OF SCHOOL BUSINESS OFFICIALS, CHICAGO, ILLINOIS

PUBLISHED-OCT65

IN- PROCEEDINGS, ASSOCIATION OF SCHOOL BUSINESS OFFICIALS OF THE  
UNITED STATES AND CANADA, 51ST ANNUAL MEETING AND EDUCATIONAL  
EXHIBIT, MINNEAPOLIS, MINNESOTA, OCTOBER 9-14, 1965

005 PAGES

DESCRIPTORS- \*BIDDING DOCUMENT, \*BUS TRANSPORTATION,  
\*TRANSPORTATION, CONTRACTS, SCHOOL SAFETY, TRAFFIC SAFETY

BIDDING DOCUMENTS FOR SCHOOL BUSES SHOULD CONSIST OF A TITLE  
PAGE, INSTRUCTION TO BIDDERS, CHASSIS SPECIFICATIONS, AND BODY  
SPECIFICATIONS. LOCAL CONDITIONS MAKE IT DESIRABLE TO CONSULT  
DRIVERS, MECHANICS, OR OTHER KNOWLEDGEABLE PEOPLE AT THE LOCAL  
LEVEL. PROPER BID OPENING PROCEDURES ARE OFTEN DETERMINED BY  
STATUTE. ALL BIDDERS SHOULD RECEIVE NOTIFICATION WHEN A BID IS  
AWARDED.

SCME THOUGHTS ON SAFETY SOURCES

BY- GRAYSON, ERNEST C.  
ASSOCIATION OF SCHOOL BUSINESS OFFICIALS, CHICAGO, ILLINOIS

PUBLISHED-OCT65  
IN- PROCEEDINGS, ASSOCIATION OF SCHOOL BUSINESS OFFICIALS OF THE  
UNITED STATES AND CANADA, 51ST ANNUAL MEETING AND EDUCATIONAL  
EXHIBIT, MINNEAPOLIS, MINNESOTA, OCTOBER 9-14, 1965

006 PAGES

DESCRIPTORS- \*EMERGENCY PROGRAMS, \*SAFETY, \*SCHOOL SAFETY,  
ACCIDENT PREVENTION, ACCIDENTS, SAFETY EDUCATION, SCHOOL  
ACCIDENTS

PUPIL SAFETY IN JEFFERSON COUNTY PUBLIC SCHOOLS IN KENTYCKY  
INVOLVES MANY FACETS. COORDINATION WITH OTHER AGENCIES MAKES  
POSSIBLE A MORE COMPLETE APPROACH. SCHOOL TELEVISION FACILITIES  
HAVE BEEN PUT TO USE TO COMMUNICATE WITH ALL PERSONNEL. BUILDING  
EVACUATION PROCEDURES HAVE BEEN ESTABLISHED. SPECIFIC  
INSTRUCTIONS HAVE BEEN GIVEN TO THE PRINCIPAL OF THE EVENING  
SESSION.

THE PLANNING AND CONSTRUCTION OF LOUISIANA SCHOOL BUILDINGS

BY- HOLLY, C. E. AND DODD, WILLIAM J.  
LOUISIANA STATE DEPARTMENT OF PUBLIC EDUCATION, BATON ROUGE

PUBLISHED- 64  
IN- BULLETIN NO. 711, REVISED 1964

160 PAGES

DESCRIPTORS- \*FACILITY GUIDELINES, \*PHYSICAL DESIGN NEEDS,  
\*SCHOOL BUILDINGS, \*SCHOOL CONSTRUCTION, \*SCHOOL PLANNING,  
EDUCATIONAL EQUIPMENT, FALLOUT SHELTERS, FINANCIAL SUPPORT, FIRE  
PROTECTION, SCHOOL LOCATION, SCHOOL SAFETY, SCHOOL SPACE, SITE  
DEVELOPMENT

THIS REPORT REPRESENTS A GENERALIZED ANALYSIS OF FACTORS  
RELATED TO PLANNING AND BUILDING STATE SCHOOLS. THE FIRST SURVEY  
PHASE IS USED FOR DETERMINATION OF EDUCATIONAL NEEDS AND  
PROGRAMS. THE RELATIONSHIPS OF THE SCHOOL BOARD TO THE ARCHITECT  
AS WELL AS PUBLIC SUPPORT AND FINANCE CRITERIA ARE EXPLAINED IN  
THIS CHAPTER. SITE SELECTION AND DEVELOPMENT ARE ANALYZED IN  
TERMS OF PHYSICAL FACTORS AND GENERAL PRINCIPLES, WHILE BUILDINGS  
ARE STUDIED ACCORDING TO--(1) ARCHITECTURAL FACTORS, (2)  
CONSTRUCTION DETAILS, AND (3) INSURANCE RATING. SCHOOL ROOM  
ANALYSIS RELATES TO--(1) CLASSROOMS, (2) SPECIALIZED AREAS, AND  
(3) AREAS OF COMMON USAGE. IMPLEMENTATION OF SERVICE SYSTEMS AND  
SAFETY PRECAUTIONS, AS WELL AS RECOMMENDATIONS FOR DUAL USE  
FALLOUT SHELTERS, ARE DISCUSSED IN SEPARATE CHAPTERS. SPECIALIZED  
EQUIPMENT FOR VARIOUS EDUCATIONAL FUNCTIONS IS ALSO ANALYZED IN  
TERMS OF ELEMENTARY AND SECONDARY SCHOOLS. (MH)

ERIC/CEF DOCUMENT NO. EF001129 ED 018 945 DISPOSITION-EDC- 1

GUIDE FOR EDUCATIONAL PLANNING OF PUBLIC SCHOOL BUILDINGS AND SITES IN MINNESOTA (1966 EDITION)

BY- TOLLERUD, GUY O.  
MINNESOTA STATE DEPARTMENT OF EDUCATION, ST. PAUL

PUBLISHED- 66

REPORT/SERIES NO.- CODE V-A-2 (REV. 66)

195 PAGES

DESCRIPTORS- \*EDUCATIONAL PLANNING, \*FACILITY GUIDELINES, \*PUBLIC SCHOOLS, \*SCHOOL BUILDINGS, \*SCHOOL LOCATION, ELEMENTARY SCHOOLS, HEALTH, HEATING, LIGHTING, SCHOOL SAFETY, STRUCTURAL BUILDING SYSTEMS, VENTILATION

A DETAILED GUIDE FOR PLANNING SCHOOL BUILDINGS AND SITES IN MINNESOTA. PART ONE DEALS WITH PROCEDURES IN SCHOOL PLANT PLANNING IN TERMS OF STATE AND LOCAL RESPONSIBILITIES. PART TWO DISCUSSES PLANNING AND DEVELOPING OF SCHOOL PLANT FACILITIES IN TERMS OF SCHOOL SITE, ELEMENTARY SCHOOL INSTRUCTIONAL FACILITIES, SECONDARY SCHOOL INSTRUCTIONAL FACILITIES, CENTRAL AND AUXILLIARY FACILITIES AND SERVICE FACILITIES. PART THREE EXAMINES SAFETY, HEALTH AND ENGINEERING IN CONSTRUCTING SCHOOL BUILDINGS IN TERMS OF FIRE AND LIFE SAFETY, STRUCTURAL DESIGN, SOUND CONTROL, LIGHTING AND FENESTRATION, PLUMBING DESIGN, SANITARY FIXTURES AND TRIM, HEATING AND VENTILATION, ELECTRICAL DESIGN, AND PREPARATION OF PLANS AND SPECIFICATIONS. INCLUDED ARE SEVERAL TABLES, FORMULAS, AND STANDARDS. THIS DOCUMENT MAY BE PURCHASED FROM THE DOCUMENTS SECTION, ROOM 140 CENTENNIAL BUILDING, ST. PAUL 1, MINNESOTA. PRICE IS \$9.50. (RK)

MANUAL FOR SCHOOL BUILDING PLANNING

BY- ENGELKING, D. F.  
IDAHO STATE DEPARTMENT OF EDUCATION, BOISE

PUBLISHED-JUN64

111 PAGES

DESCRIPTORS- \*EDUCATIONAL SPECIFICATIONS, \*SCHOOL CONSTRUCTION, \*SCHOOL DESIGN, \*SCHOOL PLANNING, ADVISORY COMMITTEES, BOND ISSUES, CLASSROOM ENVIRONMENT, CLASSROOMS, CLOSED CIRCUIT TELEVISION, CODIFICATION, COOLING, EDUCATIONAL FINANCE, ELECTRICITY, ELEMENTARY SCHOOLS, HEATING, ILLUMINATION, LIGHTING, PLANNING, PLUMBING, SAFETY, SCHOOL BUILDING, SCHOOL SAFETY, SCHOOL SURVEYS, SURVEYS, SECONDARY SCHOOLS, TELEVISION, THERMAL ENVIRONMENT, VENTILATION

THIS IS A COMPREHENSIVE PLANNING GUIDE INTENDED FOR IDAHO PEOPLE INVOLVED IN CONSTRUCTION OF SCHOOL BUILDINGS. SCHOOL BUILDING PLANNING REQUIRES A STATEMENT OF PHILOSOPHY, EDUCATIONAL SPECIFICATIONS, SURVEYS, CITIZEN INVOLVEMENT, PROFESSIONAL INVOLVEMENT, AND PRELIMINARY AND WORKING DRAWINGS. STATE APPROVAL IS REQUIRED. SCHOOL SITE SELECTION MUST CONSIDER ALL ASPECTS OF LOCAL CONDITIONS. MINIMUM SIZES ARE DEPENDENT UPON GRADE LEVEL TO BE SERVED. EXPANSION POSSIBILITIES SHOULD BE INCLUDED IN PLANNING. CONSTRUCTION PLANNING AND REQUIREMENTS MUST TAKE INTO ACCOUNT MATERIALS, CONTRACTS, STRUCTURAL DESIGN, STANDARDS, AND CONSTRUCTION DETAILS SUCH AS EXITS, DOORS, CORRIDORS, STAIRWAYS, RAMPS, HANDRAILS, CEILINGS, WINDOWS, AND GENERAL SPECIFICATIONS. SPECIFIC CONSIDERATIONS AT THE SECONDARY LEVEL ARE CIRCULATION AREAS, CLASSROOMS, SPECIAL AREAS AND LIBRARY. SIMILAR PLANNING CONSIDERATIONS MUST BE MADE FOR NEW ELEMENTARY BUILDINGS. SPECIFIC ATTENTION TO ELECTRICAL INSTALLATIONS, HEATING, VENTILATING, AND AIR CONDITIONING, SANITARY FACILITIES, WATER SUPPLY, AND SEWAGE DISPOSAL IS NECESSARY TO MEET CODE REQUIREMENTS. SEVERAL APPENDICES INCLUDED PROVIDE INFORMATION ON INSTRUCTIONS FOR BOND ELECTIONS, SCHOOL LAWS ON SCHOOL BUILDING CONSTRUCTION, RECOMMENDED HEADINGS FOR SPECIFICATIONS, AND A CHECK SHEET FOR PRELIMINARY PLANS AND SPECIFICATIONS.

AMERICAN STANDARD SPECIFICATIONS FOR MAKING BUILDINGS AND FACILITIES ACCESSIBLE TO, AND USABLE BY, THE PHYSICALLY HANDICAPPED

AMERICAN STANDARDS ASSOCIATION, INCORPORATED, NEW YORK, N. Y.

PUBLISHED-OCT61

13 PAGES

DESCRIPTORS- \*BUILDING DESIGN, \*PHYSICAL DESIGN NEEDS, \*PHYSICALLY HANDICAPPED, \*SAFETY, \*STATE STANDARDS, CORRIDORS, EQUIPMENT, PERCEPTUALLY HANDICAPPED, SCHOOL LOCATION

THIS STANDARD IS INTENDED TO PROVIDE MINIMUM REQUIREMENTS TO BE USED IN THE CONSTRUCTION OF ALL BUILDINGS AND FACILITIES AND FOR ADOPTION AND ENFORCEMENT BY ADMINISTRATIVE AUTHORITIES IN ORDER TO ALLOW INDIVIDUALS WITH PERMANENT PHYSICAL DISABILITIES TO PURSUE THEIR INTERESTS AND ASPIRATIONS, DEVELOP THEIR TALENTS, AND EXERCISE THEIR SKILLS. SPECIFIC AREAS MENTIONED INCLUDE--(1) DEFINITIONS OF DISABILITIES AND TECHNICAL TERMS, (2) GENERAL PRINCIPLES AND CONSIDERATIONS OF INDIVIDUALS FUNCTIONING BY WHEELCHAIR OR CRUTCHES, (3) SITE DEVELOPMENT, GRADING, WALKS, PARKING LOTS, (4) BUILDINGS, RAMPS, ENTRANCES, DOORS, STAIRS, FLOORS, (5) EQUIPMENT, TOILETS, WATER FOUNTAINS, TELEPHONES, ELEVATORS, CONTROLS, (6) COMMUNICATION, IDENTIFICATION, WARNING SIGNALS, AND (7) HAZARDS. ILLUSTRATIONS SHOW KNURLED DOOR HANDLES AND KNOBS. A FREE LIST OF AMERICAN STANDARDS MAY BE OBTAINED FROM AMERICAN STANDARDS ASSOCIATION, INC., 10 EAST 40TH STREET, NEW YORK 16, N.Y. (MM)

LABORATORY DESIGN CONSIDERATIONS FOR SAFETY

CAMPUS SAFETY ASSOCIATION, CHICAGO, ILLINOIS

PUBLISHED-JUN 66

027 PAGES

DESCRIPTORS- \*DESIGN, \*EQUIPMENT, \*SAFETY, \*SCIENCE LABORATORIES,  
\*STANDARDS, ACCIDENT PREVENTION, FIRE PROTECTION, LABORATORY  
SAFETY, LIGHTING, VENTILATION

THIS SET OF CONSIDERATIONS HAS BEEN PREPARED TO PROVIDE PERSONS WORKING ON THE DESIGN OF NEW OR REMODELED LABORATORY FACILITIES WITH A SUITABLE REFERENCE GUIDE TO DESIGN SAFETY. THERE IS NO DISTINCTION BETWEEN TYPES OF LABORATORY AND THE EMPHASIS IS ON GIVING GUIDES AND ALTERNATIVES RATHER THAN DETAILED SPECIFICATIONS. AREAS COVERED INCLUDE--(1) AUTOMATIC SYSTEMS FOR FIRE AND EXPLOSION PROTECTION, (2) EMERGENCY ALARM SYSTEMS, (3) SPECIAL FACILITIES FOR CHEMICAL STORAGE, HANDLING, AND DISPOSAL, (4) SAFETY EQUIPMENT, (5) FACILITIES FOR INFECTIOUS AGENTS AND ANIMALS, (6) LABORATORY VENTILATION, (7) ILLUMINATION, (8) RADIO ISOTOPES, (9) EGRESS FACILITIES, (10) FIRE RESISTANCE, (11) WATER SUPPLY AND PIPING, AND (12) MISCELLANEOUS DESIGN FEATURES. SPECIAL EMPHASIS IS GIVEN TO LABORATORY VENTILATION, AND A BIBLIOGRAPHY IS PROVIDED ON INFECTIOUS AGENTS AND ANIMALS.  
(MM)



ERIC/CEF DOCUMENT NO. EF001292

DISPOSITION-EDC- 1

PLANNING THE INDOOR PHYSICAL EDUCATION FACILITIES

BY- HASE, GERALD J. AND HICK, BASIL L.  
STATE UNIVERSITY OF NEW YORK, ALBANY

PUBLISHED- 62

SOUTH CAROLINA GUIDE AND MINIMUM SPECIFICATIONS FOR MOBILE  
CLASSROOM UNITS

SOUTH CAROLINA STATE EDUCATIONAL FINANCE COMMISSION, COLUMBIA,  
OFFICE OF SCHOOLHOUSE PLANNING

PUBLISHED-JUN66

016 PAGES

DESCRIPTORS- \*DESIGN NEEDS, \*MOBILE CLASSROOMS, \*SCHOOL  
CONSTRUCTION, \*STATE STANDARDS, BUILDING MATERIALS, CONTROLLED  
ENVIRONMENT, EQUIPMENT, SCHOOL SAFETY, SPACE REQUIREMENTS, STATE  
LAWS

THIS GUIDE OF REQUIRED AND RECOMMENDED STANDARDS FOR MOBILE  
CLASSROOM UNITS IS INTENDED TO--(1) PROVIDE A GUIDE TO LOCAL  
SCHOOL AUTHORITIES TO ASSIST THEM IN DETERMINING THE FEASIBILITY  
OF MOBILE UNITS, (2) SET MINIMUM SAFETY AND UTILITY REQUIREMENTS  
FOR MOBILE UNITS, (3) ASSURE LOCAL SCHOOL AUTHORITIES OF A MOBILE  
UNIT MEETING THE ABOVE REQUIREMENTS AND AT THE SAME TIME GIVE  
THEM A FREEDOM OF SELECTION, AND (4) SET FORTH CERTAIN MINIMUM  
MANDATORY REQUIREMENTS THAT MUST BE COMPLIED WITH BY ANY  
MANUFACTURER, VENDOR, OR CONTRACTOR. PROCEDURAL AREAS  
INCLUDE--(1) COMPLIANCE, (2) DEFINITION OF MOBILITY, (3) DATA FOR  
LOCAL SCHOOL AUTHORITIES UPON DELIVERY, (4) PERMANENT DATA PLATE,  
(5) BOND AND CONTRACT REQUIREMENTS, (6) DESIGN DATA, SAMPLES,  
BROCHURES, ETC., AND (7) APPROVED MANUFACTURERS. DESIGN AREAS ARE  
MENTIONED AS--(1) DIMENSION REQUIREMENTS, (2) STRUCTURAL DESIGN,  
(3) CONSTRUCTION MATERIALS, (4) WINDOW AND SHADES, (5) DOORS, (6)  
STEPS AND LANDINGS, (7) TEACHING AIDS AND STORAGE FACILITIES, (8)  
INTERIOR FINISHES, (9) MECHANICAL SYSTEMS, AND (10) SITE  
LOCATION. (MM)

ERIC/CEP DOCUMENT NO. EF001310 ED 017 150 DISPOSITION-EDC- 1

SOUTH CAROLINA SCHOOL FACILITIES PLANNING AND CONSTRUCTION GUIDE

BY- MC ELVEEN, W. POWERS  
SOUTH CAROLINA STATE DEPARTMENT OF EDUCATION, COLUMBIA,  
SCHOOLHOUSE BUILDING AND PLANNING SECTION

PUBLISHED- 67

082 PAGES

DESCRIPTORS- \*DESIGN NEEDS, \*EQUIPMENT STANDARDS, \*SCHOOL  
CONSTRUCTION, \*STATE STANDARDS, CONTROLLED ENVIRONMENT, HEALTH  
NEEDS, SCHOOL SAFETY, SPACE REQUIREMENTS

THIS GUIDE PRESENTS A SET OF REGULATIONS FOR PLANNING AND  
CONSTRUCTING PUBLIC SCHOOL BUILDINGS. THE AREAS COVERED ARE--(1)  
DRAWING REQUIREMENTS, (2) POLICIES GOVERNING SCHOOL SITES,  
MINIMUM FACILITIES, AND SPACE ALLOWANCE, (3) DESIGN AND  
CONSTRUCTION STANDARDS RELATING TO HEATING, AIR CONDITIONING, AND  
VENTILATION, (4) ELECTRICAL, INCLUDING LIGHTING, (5) PLUMBING,  
(6) FEDERAL AID PROJECTS, (7) SAMPLE FORMS, (8) RULES AND  
REGULATIONS OF THE BOARD OF HEALTH, AND (9) FALLOUT SHELTER.  
TABLES ARE PROVIDED FOR--(1) MINIMUM LEVELS OF ILLUMINATION, AND  
(2) WORKING HEIGHTS FOR SCHOOL FIXTURES AND EQUIPMENT.  
ILLUSTRATIONS ARE GIVEN OF FALLOUT SHELTER PLANS, ELEVATIONS, AND  
DETAILS. (MM)

ERIC/CEP DOCUMENT NO. EF001336

DISPOSITION-EDC- 2

NEW BUILDINGS WITH FALLOUT PROTECTION

DEPARTMENT OF DEFENSE, WASHINGTON, D. C.

PUBLISHED-JAN65

REPORT/SERIES NO.- TR 27

107 PAGES

DESCRIPTORS- \*BUILDING DESIGN, \*FALLOUT SHELTERS, ARCHITECTURE,  
SAFETY

FALLOUT PROTECTION CAN BE BUILT INTO A BUILDING WITH LITTLE OR NO ADDITIONAL EXPENSE USING AREAS THAT ARE IN CONTINUOUS USE IN THE NORMAL FUNCTIONING OF THE BUILDING. A GENERAL DISCUSSION OF PRINCIPLES OF SHELTER DESIGN IS GIVEN ALONG WITH PHOTOGRAPHS, DESCRIPTIONS, DRAWINGS, AND COST ANALYSIS FOR A LARGE NUMBER OF RECENTLY CONSTRUCTED BUILDINGS OF ALL TYPES INCORPORATING SUCH FALLOUT PROTECTION. (JT)

ERIC/CEP DOCUMENT NO. EFO01381

DISPOSITION-EDC- 2

SCHOOLS BUILT WITH FALLOUT SHELTER

DEPARTMENT OF DEFENSE, WASHINGTON, D. C., OFFICE OF CIVIL DEFENSE

PUBLISHED-FEB66

REPORT/SERIES NO.- TR-33

059 PAGES

DESCRIPTORS- \*BUILDING DESIGN, \*FALLOUT SHELTER, ARCHITECTURE,  
SAFETY

FALLOUT PROTECTION CAN BE BUILT INTO A SCHOOL BUILDING WITH LITTLE OR NO ADDITIONAL COST USING AREAS THAT ARE IN CONTINUAL USE IN THE NORMAL FUNCTIONING OF THE BUILDING. A GENERAL DISCUSSION OF THE PRINCIPLES OF SHELTER DESIGN IS GIVEN ALONG WITH PHOTOGRAPHS, DESCRIPTIONS, DRAWINGS, AND COST ANALYSIS FOR A NUMBER OF RECENTLY CONSTRUCTED SCHOOLS INCORPORATING SUCH FALLOUT PROTECTION. (JT)

ERIC/CEP DOCUMENT NO. EF001396

DISPOSITION-EDC- 2

BUILDINGS WITH FALLOUT SHELTER

MCGAUGHAN AND JOHNSON, WASHINGTON, D. C.

PUBLISHED-JUL66

REPORT/SERIES NO.- TR-37

659 PAGES

DESCRIPTORS- \*BUILDING DESIGN, \*FALLOUT SHELTERS, ARCHITECTURE,  
SAFETY

FALLOUT PROTECTION CAN BE BUILT INTO A BUILDING WITH LITTLE OR NO ADDITIONAL EXPENSE USING AREAS THAT ARE IN CONTINUOUS USE IN THE NORMAL FUNCTIONING OF THE BUILDING. A GENERAL DISCUSSION OF PRINCIPLES OF SHELTER DESIGN IS GIVEN ALONG WITH DESCRIPTIONS, PHOTOGRAPHS, DRAWINGS, AND COST ANALYSIS FOR A LARGE NUMBER OF RECENTLY CONSTRUCTED BUILDINGS OF ALL TYPES INCORPORATING SUCH FALLOUT PROTECTION. (JT)

ERIC/CEP DOCUMENT NO. EFC01401 ED 017 155 DISPOSITION-EDC- 1

SHELTER THROUGH ARCHITECTURAL DESIGN (THE SHIELDING REQUIREMENTS INFLUENCE ON FORM)

OFFICE OF CIVIL DEFENSE, WASHINGTON, D. C.

PUBLISHED-APR67

REPORT/SERIES NO.- TR-44

008 PAGES

DESCRIPTORS- \*BUILDING DESIGN, \*FALLOUT SHELTERS, ARCHITECTURE, SAFETY

FALLOUT PROTECTION CAN BE PROVIDED BY CAREFUL ARRANGEMENT OF ARCHITECTURAL ELEMENTS WITHOUT SPECIFIC FACILITIES FOR THEIR PURPOSE AND WITHOUT INTERFERING WITH NORMAL SPACE USE. CHARACTERISTICS OF RADIATION ARE DISCUSSED AND ILLUSTRATED PRINCIPLES OF SHIELDING DESIGN WITH RESPECT TO DISTANCE, GEOMETRY, AND TIME ARE GIVEN. (JT)

ERIC/CEP DOCUMENT NO. EFO01445 ED 018 953 DISPOSITION-EDC- 1

HOW TO PROVIDE AUTOMATIC FIRE PROTECTION FOR YOUR BUILDING

HONEYWELL, MINNEAPOLIS, MINNESOTA

IN- HONEYWELL PLANNING GUIDE

REPORT/SERIES NO.- 57-6008

028 PAGES

DESCRIPTORS- \*ELECTRONIC EQUIPMENT, \*FIRE PROTECTION, \*SAFETY,  
BUILDING EQUIPMENT, EQUIPMENT

THE ADVANTAGES OF PROMPT FIRE DETECTION IS DISCUSSED WITH  
RESPECT TO THE NATURE AND COST OF FIRES. EQUIPMENT IS DESCRIBED,  
AND DIAGRAMS OF INSTALLATIONS OF DETECTION AND ALARM SYSTEMS  
ARE GIVEN FOR SCHOOLS, HOSPITALS, COMMERCIAL BUILDINGS, INDUSTRIAL  
PLANTS, AND CAMPUSES. (JT)