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)
SAFETY FACTORS IN EDUCATIONAL FACILITIES

An Annotated Reference List
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
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.
This bulletin presents recommendations with regard to program, personnel, and facilities for an instructional materials organization and layouts for an instructional 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 Johannes, Nokma 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.
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 MoHLP. 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.
AIRM STRUCTURES FOR SCHOOL SPORTS

BY- R. ROBERTSON, N.A.
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, UNOBSURCTED 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


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

C62 PAGES


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


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.
FIRE ESCAPES AND STAIR TOWERS FOR EXISTING SCHOOLS

STATE UNIVERSITY OF NEW YORK, ALBANY

IN-1 139R-MR61-1500(46090)

05 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)
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 GCOD BIDDING PRACTICES

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

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

25 PAGES

DESCRIPTIONS- *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.
SOME 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

PAGES

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

PUPIL SAFETY IN JEFFERSON COUNTY PUBLIC SCHOOLS IN KENTUCKY 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

CRIPTORS- *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)
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


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 AUXILIARY 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)
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


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 KNURLS. 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

CAMPUSSAFETY ASSOCIATION, CHICAGO, ILLINOIS

PUBLISHED-JUN66

027 PAGES


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)
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

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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)
SOUTH CAROLINA SCHOOL FACILITIES PLANNING AND CONSTRUCTION GUIDE

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SCHOOLHOUSE BUILDING AND PLANNING SECTION

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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)
NEW BUILDINGS WITH FALLOUT PROTECTION

DEPARTMENT OF DEFENSE, WASHINGTON, D. C.
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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)
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)
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)
SHELTER THROUGH ARCHITECTURAL DESIGN (THE SHIELDING REQUIREMENTS INFLUENCE ON FORM)

OFFICE OF CIVIL DEFENSE, WASHINGTON, D. C.

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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)
HOW TO PROVIDE AUTOMATIC FIRE PROTECTION FOR YOUR BUILDING

HONEYWELL, MINNEAPOLIS, MINNESOTA

IN: HONEYWELL PLANNING GUIDE

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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)