

FREMONT ROSS H.S. NATATORIUM



Acoustic Design By:

**The D.H. Kaiser Co.
P.O. Box 21035
Canton, Ohio 44701**

Architect/Contractor - Janotta & Herner

Volume: 402,192 cubic feet

Reverberation Time: 1.63 Seconds (500Hz)

Acoustic Function Criteria:

Primary - SWIMMING

Secondary - Competition Pool w/Gallery
1100 NORTH ST. FREMONT, OH 43420

FULL DETAILS, SPECIFICATIONS AND TEST DATA ARE AVAILABLE
CALL D.H. KAISER CO. 330-456-7000 / 1-800-550-7007(OH)

NATATORIUM FACILITIES PRODUCE DIFFICULT ACOUSTIC CHALLENGES. TYPICAL CONSTRUCTION MATERIALS USED ARE MOISTURE AND CHLORINE RESISTANT, AND GIVEN THE LARGE VOLUME OF THESE SPACES, GENERALLY SUFFER FROM POOR ACOUSTICS. THE SPOKEN WORD IS LITTLE UNDERSTOOD AND EXCESSIVE NOISE IS GENERATED FROM SIMPLE ACTIVITIES WITHIN.

MODERN COMPUTER ANALYSIS CAN PREDICT THE ACOUSTIC OUTCOME WITH GREAT PRECISION. PUBLISHED GUIDELINES ARE USED TO DEVELOP A DESIGN GOAL THAT PRODUCES AN ACOUSTIC ENVIRONMENT WHERE SPEECH COMMUNICATION IS CLEAR AND MULTIPLE ACTIVITIES CAN BE PLANNED SIMULTANEOUSLY. MUSIC CAN BE PLEASANTLY REPRODUCED.

THE SOUND REVERBERATION TIME (SECONDS REQUIRED FOR SOUND TO DECAY) OF THE UNTREATED ROOM IS SHOWN ON THE ADJOINING GRAPH (RED LINE). THE DESIGN GOAL IS DEPICTED BY THE GREEN LINE AND THE TESTED RESULTS ARE IDENTIFIED BY THE LOWER BLUE LINE. THIS COMPUTER PREDICTION IS EFFECTIVE FOR VARIOUS FREQUENCIES OR PITCH OF SOUND FROM 125 HZ TO 4000 HZ. THE ACOUSTIC PRODUCTS USED HERE WERE ECKEL TYPE IV PERFORATED ALUMINUM

FREMONT ROSS H.S. NATATORIUM

