PROJECT: 274.811 February 11, 1982

REPORT OF FIELD SOUND TRANSMISSION LOSS TEST NO. 113.601

The systems tested are located in the Qualico condominium project on Beach Avenue at Burrard Street. The systems tested are Hambro D-500 floor systems between suites 304-404, 404-504, and 504-604. The tests were carried out for Hambro Floor Structures Inc.

The method used to determine the Field Sound Transmission Class for the test partitions is described in the attached "Measurement of Sound Transmission Class". Five sets of sound pressure level measurements were made in the source rooms (i.e. suites 304, 404, and 504) and five in the receiving rooms (i.e. suites 404, 504, and 604). Three reverberation time recordings were taken in the receiving rooms.

DESCRIPTION OF SYSTEMS TESTED

The construction of the floors is understood to be a 2 3/4" (nominal) concrete slab of 150 pcf concrete reinforced with 6x6 6/6 wire mesh supported by open web joists spanning 22 ft. on 4 ft. centres (nominal). The upper flange of each open web joist is embedded in concrete walls dividing the suites vertically. On the underside of the open web steel joists, 1/2" fireguard drywall is attached to metal furring channels running at right angles to the bottom flanges of the open web joists.

The three floors tested were treated as follows.

1. Suites 304-404, 1" Monoglass sprayed on the underside of the concrete slab.

2. Suites 404-504, 2" Monoglass sprayed on the underside of the concrete slab.

3. Suites 504-604, standard Hambro D-500 floor structure.

The modal requirement for diffusion is met at all test frequencies.

RESULTS OF MEASUREMENTS

Although acoustical energy was detectable in the drywall partitions in the receiving suites, flanking was not considered significant. Only one (kitchen) plumbing chase exists in the walls of the receiving suite, and acoustical energy in

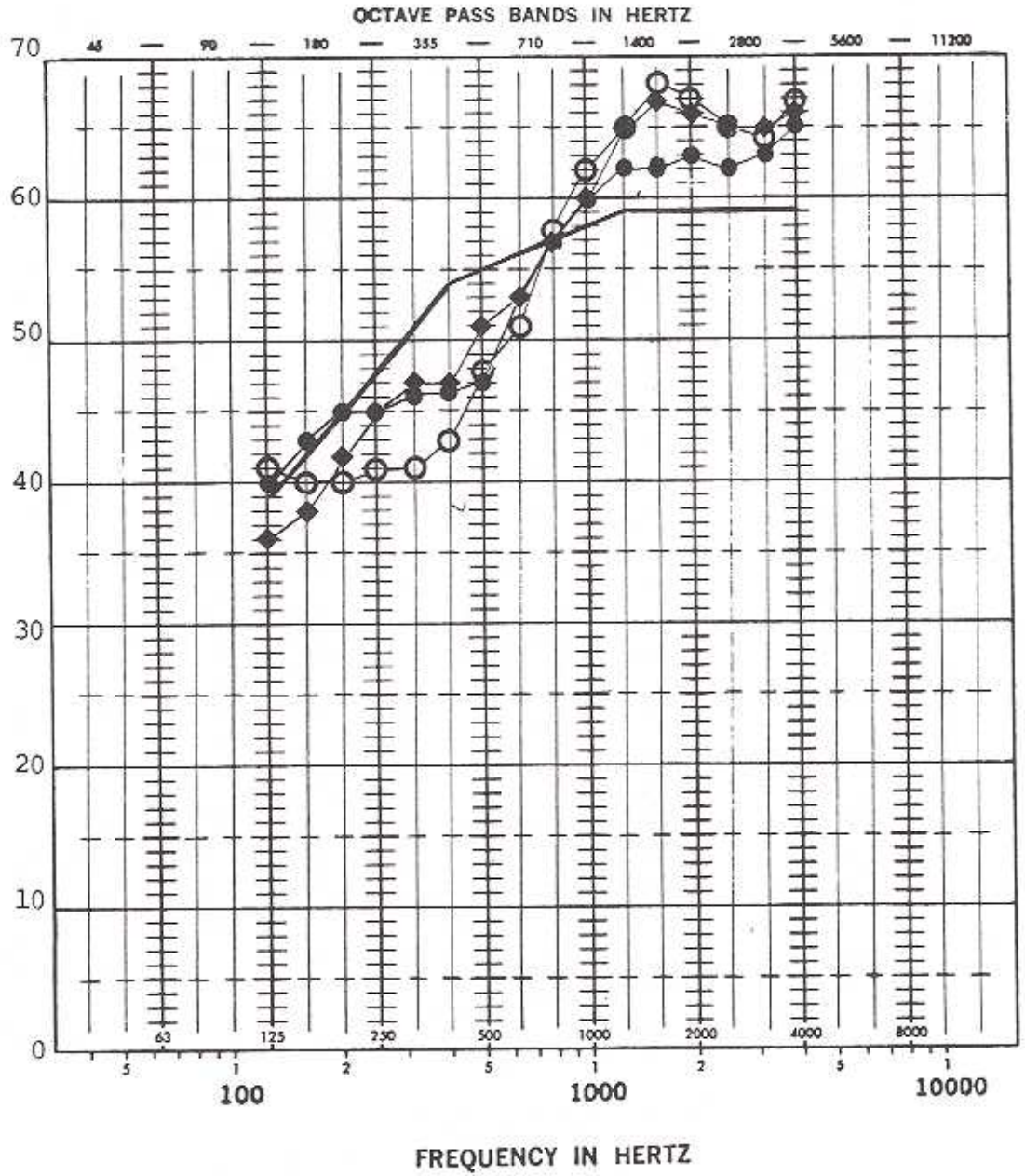
the partition containing the plumbing chase was not significantly different to that observed in other walls. The concrete supporting walls and the exterior walls are not considered to be significant flanking paths.

The measured transmission loss curves are indicated on Graphs 1-3 and details of the test procedure are available on request. The measured results are:

A. Suites 304-404 - FSTC 55, 1" Monoglass

B. Suites 404-504 - FSTC 55, 2" Monoglass

C. Suites 504-604 - FSTC 52, Standard Floor.



LEGEND

Measured transmission loss:

- Suites 304-404
  1" Monoglass
  FSTC 55
- Suites 404-504
  2" Monoglass
  FSTC 55
- Suites 504-604
  No Insulation
  FSTC 52
- FSTC 55 rating curve

PROJECT	Hambro Floor Structures Inc.
GRAPH TITLE	Field Transmission Loss Data
GRAPH NUMBER	1
PROJECT NUMBER	274.811
DATE	8 February 1982