



CERAMIC TILE INSTITUTE OF AMERICA, INC.
12061 Jefferson Blvd., Culver City, CA 90230-6219

CTI FIELD REPORT 80-2-4 (R-85)

SUBJECT: ROMAN TUBS OVER WOOD FRAME AND PLYWOOD CONSTRUCTION

INTRODUCTION

1. In the latter years of the 1950's the tile trade in the Los Angeles area worked with the plumbing officials to develop installation standards for showers and Roman Tub.
2. One of the results was our document, CTI-R4-108-64, "Roman Bath Tubs." This document was issued in 1964. About this same time this standard became a part of the Uniform Plumbing Code as U.P.C. - I.S.-2-65.
3. The only permissible way of constructing a Roman Tub at that time is as shown in the document where a concrete shell is required.
4. In 1978 CTI-R4-108-64 was changed by the addition of a detail showing Roman Tub construction over wood frame structures without the concrete shell. The Uniform Plumbing Code has also been changed by adding the same detail.
5. Currently the tiled Roman Tub seems to be a status symbol. The Roman Tub is found in almost all custom houses and in the upper price level tracts. It is therefore an important item to us.

DISCUSSION

..BACKGROUND TO CHANGES

1. Through pressure of general contractors, constructing in the Orange County area, building officials allowed the Roman Tub construction without the concrete shell. This was prior to the adoption into the Uniform Plumbing Code.
2. Since these were being installed contrary to the Code, concerned building officials asked CTI to take it to the International Association of Plumbing and Mechanical Officials for a code change.
3. This was done and the code addition made, so that the concrete shell could be omitted.

..LACK OF UNIFORMITY

4. The construction industry works to develop what is called a Uniform Code. The fact it is called Uniform does not always mean it will be so.
5. The CTI requirements and the Uniform Plumbing Code requirements are shown in the document. This is regardless if the Roman Tub is on the ground floor or on upper floor levels.
6. If you build in Los Angeles County, and you want to put Roman Tubs on upper floor levels without the concrete shell, you must make the waterproof membrane out of fiber glass.
7. If you build in Beverly Hills, you must first place a leakproof galvanized metal pan around the Roman Tub.
8. If you check other municipalities no doubt, different requirements may be found.

..CAUSE FOR CONCERN

9. CTI has been asked to look at one job where a Roman Tub, on wood frame construction, was

CONCLUSION

1. The tile trade needs to have all of the satisfactory ways of installing tile available and to have them allowed by the Code.
2. We do need to install fault free and leak proof Roman Tubs.
3. If we do not, the Code can be changed by the building officials and the item left out of the Code.
4. We do need to, and will, work toward establishing a uniform way of installation on Roman Tubs and other installations.

See the next two pages!

ROMAN TUBS OVER WOOD FRAME CONSTRUCTION

If you are in any way involved in the design, specifying or installing of Ceramic Tile lined Roman Tubs over wood frame construction, call the Department of Building and Safety. Be sure you know the requirements of the Department of Building and Safety in the City or County in which the structure is located, before you design or install.

Along with this story is an illustration of a Roman Tub taken from the Ceramic Tile Institute brochure on Roman Tub Construction. As stated on the cover of the brochure,) the details were developed in cooperation with the International Association of Plumbing and Mechanical Officials, This is the organization that sponsors the UPC (Uniform Plumbing Code). When the Uniform Plumbing Code is printed, the details from the Ceramic Tile Institute brochure are copied into the Uniform Plumbing Code and a credit line given to Ceramic Tile Institute.

The entire effort of all of this is to have uniformity in construction; so that if you take the details from the Ceramic Tile Institute brochure or the UPC, you do not have to call individual City or County administrative authorities. Many cities and counties do use the code as printed, but unfortunately, others do not.

One harassed general contractor sent information to Ceramic Tile Institute on his problems with the Los Angeles County Engineers, Building and Safety, Plan Check Department. This is an example of why you need to check in advance of detailing or installing.

Procedure of Los Angeles County:

- A. They duplicate the page out of the Ceramic Tile Institute brochure.
- B. They Zine through the words, "Waterproof" membrane." and write in minimum 3/16" fiberglass".
- C. They furnish another sheet with the following statements:

..*Subject: Roman Bath Tubs*"

"Roman Bath Tubs shall be installed in accordance with the latest edition of the Standard Specifications for the Installation of Tile Lined Roman Tubs published by the Ceramic Tile Institute with one exception. Hot mopped 15 pound asphalt saturated felt shall not be acceptable for the waterproof membrane for tubs constructed with wood framed bases:"

..A fiberglass Zining with a minimum thickness of 3/16 inch. This lining may either be prefabricated or appzied at the job site. Prefabricated Ziners which have a Zoose or szoppy fit shouzd be backed with pzaster of paris or like material."

..Chloraloy Brand 240. This liner must be shop fabricated. It is a grey flexible plastic material, .040 inches thick and must have the Doing marking:"

"CHLORALOY WATERPROOF MEMBRANE FOR TILE TUBS. DIELECTRIC HEAT WELDED."

Ceramic Tile Institute will continue to work toward uniformity but until this is truly achieved we are faced with the necessity to check with the Department of Building Safety in the city or county in which the structure is located prior to detailing or installing Roman Tubs on Wood Frame Construction.