OUTDOOR STAIRS AND BRICK WALLS
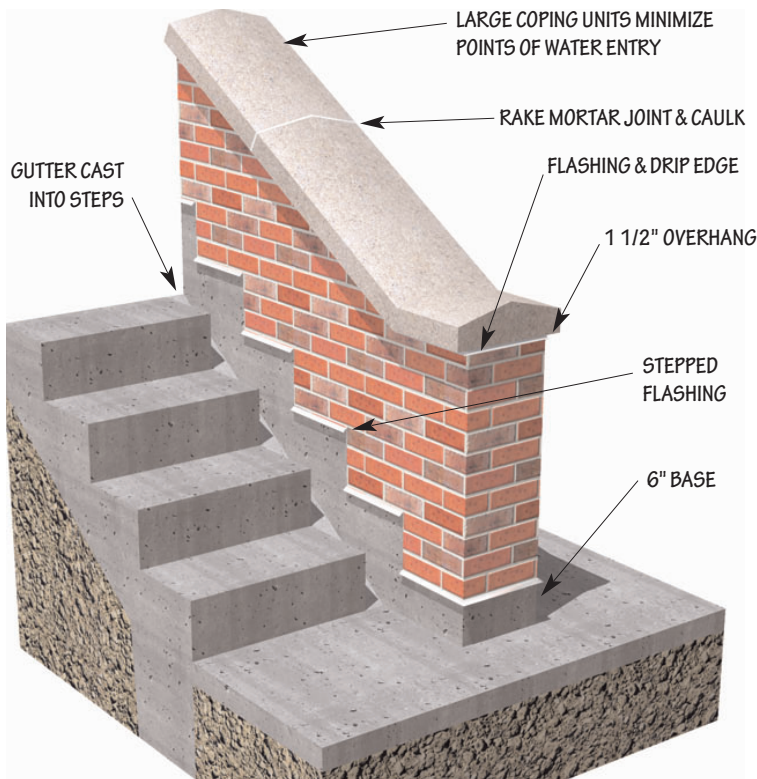# THE GOOD, THE BAD AND THE LEAKY

JASON YANA

THE GOOD

To a certain degree, architects and designers need to predict the future on a daily basis. This might sound odd, but it really isn't. It does not take Nostradamus to know that it will rain, snow and freeze during winter in the midwest.

Now that we know the future, let's prepare for it by using a durable cap at the top of all exterior masonry walls that offers few joints for water to infiltrate, has a minimum 1 1/2" overhang past the face of the wall, and has drips cut into it. A layer of flashing should be place directly underneath this cap to further ensure that water will not get into the wall and cause spalling due to freeze thaw cycles.

To keep our design on the good side of this page, we also need to pay close attention to where stairs meet our wall. If we simply raise and step our foundation up 6 inches, and provide a drainage gutter between our steps and our wall, we don't provide a place for water and de-icing salts to pond and infiltrate our masonry wall.

Stepped base flashing at the base completes this "good" and predictive wall.
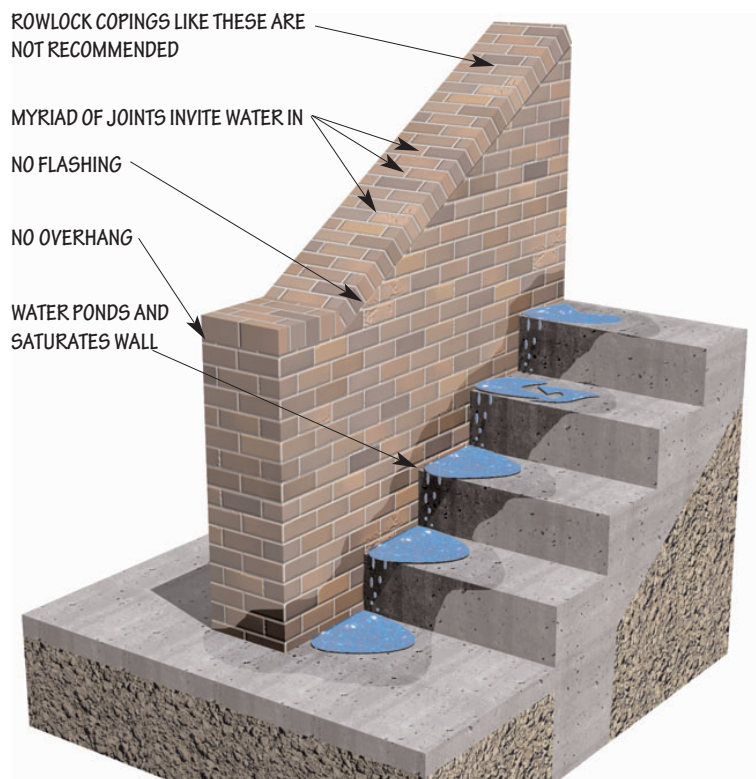
THE BAD AND THE LEAKY

These steps were clearly not designed by Nostradamus, AIA. The cap was not flashed properly and did not have a layer of flashing under it.

Furthermore, the brick is flush with the stair surface, not on a raised brick ledge like our good example to the left.

Without raising the brick up 6 inches, every step in this type of design is another step towards demolition. Water can easily pond and collect at the intersection between the wall and each step. It then finds it's way into the brick, either by being absorbed by the material itself, or by tiny fissures between the brick and mortar. Once the wall is saturated, years of successive freeze thaw cycles eat away at the wall until it looks like the walls in the above photo.

Staying one step ahead of the weather and the competition using sound principles of water management and flashing can make the average designer look like a sage.

LARGE COPING UNITS MINIMIZE POINTS OF WATER ENTRY

RAKE MORTAR JOINT & CAULK

FLASHING & DRIP EDGE

1 1/2" OVERHANG

STEPPED FLASHING

6" BASE

GUTTER CAST INTO STEPS

ROWLOCK COPINGS LIKE THESE ARE NOT RECOMMENDED

MYRIAD OF JOINTS INVITE WATER IN

NO FLASHING

NO OVERHANG

WATER PONDS AND SATURATES WALL

THE GOOD

THE BAD AND THE LEAKY