A few years ago in downtown Naperville North Central College, a Division III school renowned for both its athletic and academic prowess, decided to build the first LEED-Silver certified, combination residential/recreational facility in the country. This groundbreaking building structure won the National Award for the Most Sustainable Precast Concrete building in the entire United States.

To review: The “building-within-a-building” structure consists of a 400-bed, four-story student dormitory which surrounds a fifty-foot tall recreational sports complex, housing an NCAA 200-meter track and a third-level suspended running track. Weight training facilities, administrative offices, and a two-level Hall of Fame gallery celebrating over 150 years of North Central College accomplishments, are also contained within the spacious 201,000-square-foot layout.

Looking back, the college’s decision to embrace a “total systems approach” for this outstanding complex showed great wisdom. The incorporation of geothermal heating and cooling systems; energy-efficient windows and lighting; selection of low VOC (volatile organic compounds) and high recycled content materials; and ultimately combining these with a unique “dual finish” thermal-mass friendly precast concrete wall and floor system, allowed the college to save over 20 percent of the building costs over traditional construction, with the added bonus of having the construction time shortened by valuable months. On time and under budget – that says it all.

The best, however, is yet to come. In a building’s life, as we all know, the operating costs will far exceed the original construction costs. This is where the Res Rec Building (as it is called) will really prove its worth. Money spent for the heating, cooling, and maintenance of such a large building could really add up, if the actual in-use energy performance lags expectations. The financial impact would be substantial. The great news here is that in the first few years the actual energy performance of the building has been nothing short of outstanding! Energy and cost reductions have been more than 20 percent. The payback period for all the unique “bells and whistles” that made this such a green sustainable building appears to be on track for a seven- to nine-year time frame. After that the college will be “money ahead” for decades to come.

In closing, the one item that sometimes gets lost in the shuffle when we talk about energy-efficiency, green products, sustainability, and measured building performance is the human aspect of actual comfort in their building environment. That is where the testimonials from the building’s occupants – from the 400 students who live, play, study, sleep, and call it home to the college faculty staff members who go to work here throughout the year – are important to listen to. The comments are almost universal when one hears their responses: “We love the radiant heating”; “It is so quiet in our rooms”; “There are no drafts like the other dorms”; “I love that we have everything in one building like this”; “This is the #1 choice for student housing”; and most interestingly, “This building is a model for the future.”