

Security of the Southside Halls of Residence

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It all seemed rather impressive: swipe cards, RFID, strange looking keyholes and a security guard on-hand to testify about the impressive security of the Southside 'complex'. At least that is how it was presented during freshers week. We were told that so long as our doors were shut correctly that it was almost impossible to break in and that all burglaries thus-far had been as a result of students not shutting their doors.

So that's exactly what the 350+ freshers living in Southside did — in the belief that they were secure. Of course, it was not long before the more astute students realised that it was theoretically possible to open the doors using a credit card. A Hollywood favourite shimming is a lock-bypass technique whereby a flexible object — such as a credit card — is slid in between the door and the frame and used to manipulate the latch. For this to work two conditions must be satisfied.

Firstly, the door can not be dead bolted, which is when bolt is connected directly to the locking cylinder. Thus the only way to move the bolt is to rotate the cylinder — which requires the key to be inserted. Although most house locks are dead bolted those in Southside are not. This is as a result of the swipe card access system. (In order for the doors to automatically lock when closed the latch must always be free to move.)

Secondly, there must be sufficient space between the frame and the door to allow a shim to be inserted. Although this should **never** be the case there is no substitute for shoddy workmanship, as I will get into later.

While you occasionally heard stories of someone in another Southside hall managing to get into their rooms using a credit card, few took them seriously, assuming that his/her door had shifted significantly to make it possible. Until, that is, I tried it myself.

After five minutes R&D with a fellow Physicist and an empty coke can we had created our own shim. Being made of aluminium it was a good deal thinner than a credit card and much better shaped. Using this we were able to open (with permission, naturally) over 70% of the doors we tried. Usually the entire process,

from inserting the shim to opening the door takes a smidgeon under five seconds. Five seconds!

Some of the doors are so bad that it is possible to open them by wedging an unfolded Tropicana carton in between the door and the frame and jiggling it around for a few seconds.

But, there's more. Each person in Southside has a lockable drawer in their wardrobe. Perfect for valuables, such as cash, passports &c — or so we thought. Sadly the locks used on these drawers are some of the poorest I have come across in my two years of picking. In lock-jargon terms: the locks have an open rectangular keyhole with a single row of three pins; none of which are security pins.

With a set of lock picks it is possible to open any of the drawers in Southside in under ten seconds, on average. However to add insult to injury, so to speak, it is possible to open them in a similar amount of time using nothing but a screwdriver and metal paper clip. Although those with any experience picking locks normally frown at the use of paper clips (on most real locks they are useless) the locks in Southside are so exceptionally poor that they are actually a valid option.

It is a somewhat disturbing thought that a would-be burglar needs nothing more than a folded up coke can, a screwdriver and a paper clip to be able to successfully mount a crime spree on most of the rooms in Southside. Moreover with tailgating into the building as easy as it is this is something of a real concern for both myself and others who I have talked to on the issue.

So, what can be done about all of this? Well, in the short term, very little. Thankfully with only one week left and very few (if any) robberies this year us Southside residents can consider ourselves lucky.

In the long term security and residency will need to look at each and every door in Southside and see if it is vulnerable to shimming. If this is the case then the door will need to be reseated such that it is impossible to insert a shim.

If nothing is done then I would not be surprised if by the time next years lambs come to the slaughter (I mean, err, freshers) that over 85% of the doors could be susceptible to shimming. This is because Southside appears to be either (depending on who you talk to) still settling or subsiding; resulting in ever larger gaps between doors and frames.

As for the lockable drawers, my *personal* recommendation is that locks on each drawer are changed to something more substantial. It is somewhat ironic that the locks on the doors — which are seldom used — are some of the best in the industry (jargon: Mul-T-lock Classic dimple locks featuring pins-in-pins, layman: reasonably difficult to pick) while the drawer locks are some of the worst available.

Finally, what does this mean for the new Eastside halls? While I have not visited Eastside yet I would not be surprised if it uses the same set-up as Southside and so is also likely to be equally vulnerable.