## Grime Studios Phase Two, Part A

## Artist Studio and Musician Rehearsal Space

Grime Studios is a 25-room musician rehearsal/ artist studio space located in the IM zone at 299 Presumpscot Street. This location is a warehouse owned by Topspin LLC. The applicant Grime Studios initially applied for a larger multi studio project but it was scaled back prior to construction. From the outset a second floor was contemplated to meet the demands of the burgeoning music community in Greater Portland. Phase 2 is that effort.

In early 2015 work commenced on the construction of 21 ground floor studios which are currently serving the needs of 50 local bands (out of more than 300 area bands) in the greater Portland area. A certificate of occupancy was granted on April 25, 2016. The initial phase one construction was designed by Ryan Senatore of RSA Architects with structural engineering by Aaron Jones of Structural Integrity who designed the walls and ceilings with the understanding that additional studios on the second floor would be built in a later phase.

The Phase 2 project (also designed by RSA and Structural Engineering) is the construction of an additional 21 musician and artist studios at the existing rehearsal facility at 299 Presumpscot Street.

For economic reasons Phase 2 will be built in two parts. Part A is the construction of a single ground floor room that can be divided into 2 rooms as demand dictates. The construction of the single room will cost approximately \$30,000 when sprinklers and alarms are factored in Part B will easily exceed \$250,000 and those funds have not yet been secured.

The Part A first floor single room studio will be constructed similar to the Phase 1 construction with 18 Ga structural metal studs and track on all load bearing walls. All of the walls in Part A will be load bearing and therefore will be constructed using 18 Ga metal studs.

In Phase 1, the non-load bearing walls were constructed with 22 Ga metal studs and track. The load bearing walls are designed to support a floor joist system of 16 Ga 9" metal joists, and the second floor concrete deck utilizing the noncombustible materials of corrugated sheet metal covered with 2" of lightweight concrete decking, in which metal mesh has been placed.

When the ground floor studios were originally constructed, finances were limited. In order to address the sound attenuation needed for a music rehearsal studio, where music from heavy metal to acoustic guitars are played. Prior to having to expend significant resources building the floor joists for a second floor deck, permission was requested to add ceiling joists located below the heaver gauge floor joists. This ceiling was built with 20 gauge joists to accept the sound board and fire rated 5/8" sheetrock and roxul insulation. These ceiling joists were placed on the perpendicular to the approved configuration of the floor joists. To accommodate the 6" height for these ceiling joists and allow for the heavier gauge floor joists to be installed as originally permitted an inquiry was made and approved by the inspection department to utilize four layers of fire retardant 2x6 to elevate the base upon which the floor joists would be eventually placed.

The initial phase 1 ceiling joists are all connected with metal strapping designed for stability and stiffness. Additionally, all of the wall studs are connected with metal web stiffeners for stability and strength. With sound attenuation between studios being a major concern, a double wall system was constructed with a 1" spacing between walls. On the load bearing wall, one layer of sound board was installed with 6" of Roxul sound proofing insulation, all covered by a layer of 5/8 rated sheetrock on each surface.

The second of the double walls adjacent to a load bearing wall was not required to be load bearing, and therefore was built with 22 Ga metal studs and track. It has 4" of Roxul insulation, and 5/8" rated sheetrock.

Part B of Phase 2 will be the construction of 20 studios on the second floor utilizing 16 Ga metal floor joists upon which the corrugated metal sheeting will be covered by concrete. This will serve as the basis for construction of the studio walls built from 22 Ga metal studs. Where two studios are adjacent, a similar double wall system will be employed with soundproofing Roxul insulation a single sound board and a layer of 5/8" rated sheetrock on each exterior surface. Ceiling joists will be installed with a metal strapping system similar to the first floor. Attached to these ceiling joists will be sound board, 5/8" rated sheetrock and Roxul insulation.

The second floor will be accessed in two locations, each with welded metal stair systems and concrete filled treads