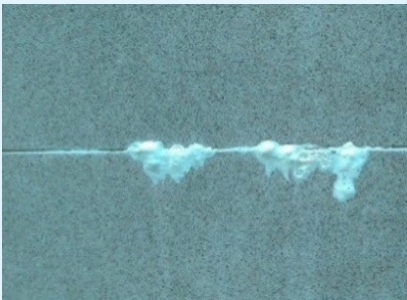








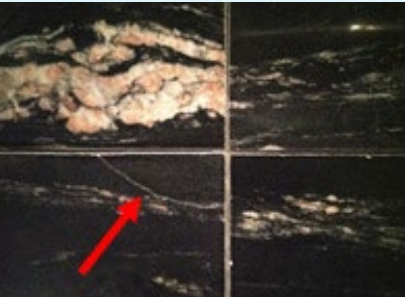





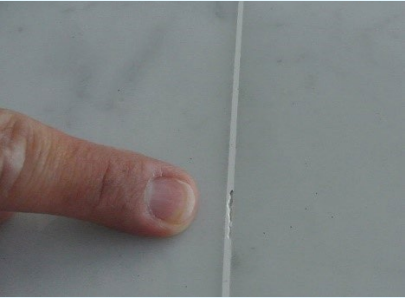
7.0 COMMON FEEDBACK

To achieve good stonework, designers and site supervisors should understand the common feedback related to stone installation and how to avoid them. Workers should be skilled and they should take pride in their craftsmanship. The following are some of the common feedback from owners.

Common feedback	Possible causes	Recommendations
1. Finishing		
1.1. Efflorescence 	a) Salts within stone and/or adhesive and render/screed mortar b) Moisture getting into adhesive and mortar beds from under the floor or through joints	- Avoid excessive wetting - Use proper waterproofing
1.2. Inconsistent tonality 	a) Choice of materials with excessive colour variations b) Lack of pre-laying to ensure colour variation is acceptable c) Prolonged dampness due to water ingress	- Select suitable stone - Carry out pre-lay - Use proper waterproofing
1.3 Paint stain / marks 	a) Protection not provided during paint work b) Spillage of paint c) Insufficient protection coverage	- Provide proper protection - Provide proper protection - Provide sufficient protection coverage

Common feedback	Possible causes	Recommendations
2. Hollowness		
<p>2.1. Hollow stone</p> 	<ul style="list-style-type: none"> a) Stone set on substrate over a large open area b) Air entrapped in either between adhesive or substrate c) Voids within the stone 	<ul style="list-style-type: none"> - Acoustical effect rather than bonding problems - Stone to be properly laid - Select suitable stone
3. Alignment and Evenness		
<p>3.1. Stones out of alignment</p> 	<ul style="list-style-type: none"> a) Inconsistent dimensions of stone b) Poor workmanship 	<ul style="list-style-type: none"> - Select suitable stone - Use skilled worker
<p>3.2. Uneven surface</p> 	<ul style="list-style-type: none"> a) Warped stone b) Varied stone thickness c) Uneven substrate d) Incorrect adhesive thickness 	<ul style="list-style-type: none"> - Proper dimensional stability - Correct stone thickness - Proper surface preparation - Use proper tools / skilled worker
<p>3.3. Uneven level between 2 stones (lippage)</p> 	<ul style="list-style-type: none"> a) Varied stone thickness b) Incorrect adhesive thickness c) Uneven substrate d) Poor workmanship e) Large stone with narrow grout joint 	<ul style="list-style-type: none"> - Correct stone thickness - Use proper tools / skilled worker - Proper surface preparation - Use skilled workers - Widen grout joint

Common feedback	Possible causes	Recommendations
4. Crack & Damages		
<p>4.1. Scratched stone</p> 		
<p>4.2. Cracked stone</p>  	<p>a) Inadequate expansion joints b) Damaged by other trade or direct impact c) Inherent characteristics of stone e.g. stylolite</p>	<p>- Allow movement joints - Proper protection - Inherent</p>
<p>4.3. Chipped stone</p>  		

Common feedback	Possible causes	Recommendations
5. Jointing		
<p>5.1. Jagged pointing / edge</p> 	<p>a) Insufficient curing time b) Poor workmanship c) Poor cutting and handling</p>	<ul style="list-style-type: none"> - Follow manufacturer's recommendation - Use skilled workers - Use proper tools and skilled workers
<p>5.2. Poor grout joint</p> 		

7.1 REPAIRING WORKS

Builders are encouraged to “Do things right the first time” as it can help eliminate double work. However, minor damages such as chips, cracks and scratches on natural stones are unavoidable. Replacing localised damaged stones may result in other issues with the completed stonework. Factors like tonality difference, damage to adjacent stones, loss of time, etc. can occur. Therefore, repair to the installed or laid stone with the correct and approved method can be an alternative to replacement of stones for minor damages.