

Job Demands Analysis - BUILDING WORKER (THEATRE)

Purpose

- The purpose of the Building Worker (Theatre) is to clean the Orpheum Theatre, the Queen Elizabeth Theatre, and the Vancouver Playhouse.

Essential Duties

- The Building Worker (Theatre) has 6 essential duties:

- (1) Tile and linoleum floor cleaning (D1)
- (2) Carpet cleaning (D2)
- (3) Wall and counter cleaning (D3)
- (4) Garbage and recycling (D4)
- (5) Bathroom cleaning (D5)
- (6) Event preparation (D6)

Summary of Demands

| | Sedentary | Light | Medium | Heavy | Very Heavy |
|-----------|-----------|-------|--------|-------|------------|
| Physical | | | X | | |
| Cognitive | | X | | | |

The job is **physically** demanding. The Building Worker (BW) needs to:

- Carry cleaning supplies that weigh between **1-9 kg**.
- Occasionally carry items that weigh up to **36 kg**.
- Push and pull carpet and floor cleaning equipment.

Workers require physical **endurance** to:

- Continuously stand and walk (95 % of their shift).

Building Workers (Theatre) need to travel between the complex that houses the Queen Elizabeth and Vancouver Playhouse theatres and the Orpheum Theatre. This is a distance of approximately 350 metres.

Shift Structure

- Building Workers (Theatre) normally work 7 am to 3 pm. They get a 30 minute meal break and two 10 minute rest breaks.



Job Demands Analysis - Building Worker (Theatre): Summary Table

| a) Physical Demands | | Frequency During Shift* | | | | | Weight | | Comments | |
|-------------------------|----------------------------|-------------------------|------|------------|------------|----------|----------|------------|----------------------|---|
| | | Never | Rare | Infrequent | Occasional | Frequent | Constant | Usual (kg) | | Max (kg) |
| Strength | Lifting - Floor to Knuckle | | | | X | | | 1-9 | 30 | Cleaners, garbage/recycling bins All Duties |
| | Lifting - Knuckle to Waist | | | | | X | | 1-9 | 30 | Cleaners, garbage/recycling bins All Duties |
| | Lifting - Over Head | | X | | | | | 1-9 | 30 | Cleaners, garbage/recycling bins All Duties |
| | Carrying - with Handles | | | | X | | | 1-9 | 30 | Garbage/recycling bins, mop bucket D1, D4 |
| | Carrying - without Handles | | | | X | | | 1-9 | 30 | Cleaners, garbage/recycling bins All Duties |
| | Pushing - Upper Extremity | | | | X | | | 1-9 | 36 | Carts, vacuums, shampoers, doors, push broom All duties |
| | Pushing - Hips/Legs assist | | | | X | | | 1-9 | 36 | Carts, vacuums, shampoers, push broom All duties |
| | Pulling - Upper Extremity | | | | X | | | 1-9 | 36 | Carts, vacuums, shampoers All Duties |
| | Pulling - Hip/Leg Assist | | | | X | | | 1-9 | 36 | Carts, vacuums, shampoers All Duties |
| | Reach - Shoulder or Above | | | X | | | | | | Cleaning walls/vents, sweeping, vacuuming D2, D3, D4, D5 |
| | Reach - Below Shoulder | | | | | | X | | | cleaning walls/vents, sweeping, vacuuming All Duties |
| | Handling | | | | | | X | | | Cleaning tools All Duties |
| | Fine finger movements | | | | X | | | | | Cleaning tools D1 |
| | Mobility | Neck - Static Flexion | | | | | X | | | |
| Neck - Static Neutral | | | | | | X | | | | Standing, walking All Duties |
| Neck - Static Extension | | | | | X | | | | | Scanning near tops of walls D2 D3 |
| Neck - Rotation | | | | | X | | | | | General cleaning duties All Duties |
| Throwing | | | | X | | | | | | Items in garbage or recycling bin D4 D5 |
| Sitting | | X | | | | | | | | |
| Standing | | | | | | | X | | | Throughout shift All Duties |
| Walking | | | | | | | X | | | Through areas assigned to clean All Duties |
| Running/Jumping | | X | | | | | | | | |
| Climbing | | | | X | | | | | | Up stairs D1, D3, D4 |
| Bending/Stooping | | | | | | X | | | | While cleaning areas below shoulder height All Duties |
| Crouching | | | | X | | | | | | While cleaning All Duties |
| Kneeling | | | | X | | | | | | While cleaning D1, D3, D4, D5 |
| Crawling | | X | | | | | | | | |
| Twisting | | | | X | | | | | | Emptying garbage/recycling D4 |
| Balancing | | | X | | | | | | On stairs D1, D3, D4 | |
| Travelling | X | | | | | | | | | |



Job Demands Analysis - Building Worker (Theatre): Summary Table (continued)

| a) Physical Demands (continued) | | Frequency During Shift | | | | | | Comments |
|---------------------------------|-----------------------------|------------------------|---|---|---|---|--------------------|--|
| | | N | R | I | O | F | C | |
| Sensory / Perception | Hear/Conversations | | | X | | | | Receive instructions from supervisor |
| | Hear/Other Sounds | X | | | | | | |
| | Vision/Far | | | | | | X | Cleaning building All Duties |
| | Vision/Near | | X | | | | | |
| | Vision/Colour | | | X | | | | Select proper hose on the cleaning fluid dispenser, paper recycling D2, D4 |
| | Vision/Depth | | | | | | X | Clean buildings All Duties |
| | Perception/Spatial | | | | | | X | Clean buildings All Duties |
| | Perception/Form | | | X | | | | Equipment selection All Duties |
| | Feeling | X | | | | | | |
| | Speech | | | X | | | | Communicate to co-workers All Duties |
| Work Environment | Inside Work | | | | | | X | Work done inside Theatre buildings All Duties |
| | Outside Work | | | X | | | | Garbage pick up D4 |
| | Slippery | | | X | | | | Wet floors, showers, spills D1, D2, D5 |
| | Congested worksite | X | | | | | | |
| | Chemical Irritants | | | | | X | | Cleaning supplies All Duties |
| | Confined Space Entry | X | | | | | | |
| | Vapour Fumes | | X | | | | | Cleaning supplies All Duties |
| | Noise | | | X | | | | Power Burnisher D1 |
| | Proximity to Moving Objects | X | | | | | | |
| | Hazardous Machines | X | | | | | | |
| | Electrical hazard | X | | | | | | |
| | Sharp Tools | X | | | | | | |
| | Radiant/Thermal Energy | X | | | | | | |
| | Hot/Cold | X | | | | | | |
| | Humid | X | | | | | | |
| | Dust | | | X | | | | Sweeping and dusting D1, D3 |
| | Organic Substances | | | X | | | | Vomit, Human waste in washrooms D5 |
| | Medical Waste | X | | | | | | |
| | Blood Products | X | | | | | | |
| | Lighting - Direct | | | | X | | | All Duties |
| Lighting - Indirect | | | X | | | | | |
| Vibration - Whole Body | X | | | | | | | |
| Vibration - Hand/Arm | | | X | | | | Power Burnisher D1 | |



Job Demands Analysis - Building Worker (Theatre): Summary Table (continued)

| b) Cognitive and Psychosocial Demands | Frequency During Shift | | | Comments |
|---------------------------------------|------------------------|-------------------------|---------------------|--|
| | Never / Rare | Infrequent / Occasional | Frequent / Constant | |
| Degree of Supervision | X | | | |
| Time Pressure | | | X | Frequent occasions where there is a lot of garbage and recycling All duties |
| Attention to Detail | | | X | Need to be able to spot dirty walls, spots on floors All Duties |
| Memory | | X | | Need to remember where janitorial supplies are, where garbage cans are located in various areas. |
| Interact with co-workers | | X | | Dependent upon the shift, some BWs work in teams. All Duties |
| Interact with public | X | | | |
| Work Alone | | X | | Dependent upon where cleaning. All Duties |
| Reading | X | | | |
| Writing | X | | | |
| Irregular Hours | X | | | |
| Operating Equipment | | X | | Power Burnisher, Steam Cleaner D1 D2 |

Frequency rating definitions

* The frequency rating definitions are from the Dictionary of Occupational Titles (DOT, 1991, 4th edition) published by the US Department of Labor.

| | Time per Day | Percentage of Shift |
|------------|------------------------|---------------------|
| Never | 0 minutes | 0 % |
| Rare | 0 - 5 minutes | 0-1 % |
| Infrequent | 6 - 25 minutes | 2-5 % |
| Occasional | 26 minutes - 2.5 hours | 6-33 % |
| Frequent | 2.6 - 5.25 hours | 34-66 % |
| Constant | 5.26 - 8 hours | 67-100 % |



Physical Environment

The work takes place in the Orpheum Theatre, the Queen Elizabeth Theatre, and the Vancouver Playhouse. General illumination is provided by stage lighting, natural lighting, and overhead florescent light fixtures that are in the ceilings throughout the various theatre buildings.

Staffing Levels

The Building Worker (Theatre) will either work alone for most of their shift, or in teams of 2-3 individuals dependent upon their duties and where they clean. The staffing levels vary, depending on the number of shows being performed at any given time. They range from 2 Building Workers working with other staff during slow periods to 10 BWs working during peak periods in October and November.

Tools and Equipment Used

The Building Worker (Theatre) uses a variety of supplies and tools while working. The list includes the cleaning agent dispenser, cleaning materials and supplies, cleaning tools, power tools, and equipment (carts, trolleys and bins).





Figure 1: Cleaning Agent Dispenser

Cleaning Agent Dispenser

Most cleaning agents come pre-mixed from the Cleaning Agent Dispenser (see figure 1 above). It can be used to dispense: glass cleaner, disinfectant, floor cleaner, carpet cleaner, toilet cleaner.

Cleaning materials and supplies

In addition to the cleaning agents that are in the Cleaning Agent Dispenser, the Building Worker (Theatre) will also use metal polish.

Supplies used by the Building Worker (Theatre) include: deodorant urinal tablets, paper napkins, toilet paper, garbage bags, refill bottles of hand soap, rubber gloves, and dust masks.

Cleaning Tools

Cleaning tools used by the Building Worker (Theatre) include: brooms, push brooms, mops, long handle dust pan, duster, rags, buckets, extension cords, small hand tools, toilet plunger, toilet brush, scraper, and “wet floor” signs.



Power tools

Power tools used by the Building Worker (Theatre) include: auto scrubber, power burnisher (see Figure 2 below), up-right vacuum, backpack vacuum, and carpet shampooer.



Figure 2: The Power Burnisher



Figure 3: The Carpet Shampoo Machine

Other Equipment

Garbage containers, recycle bins, and carts.



Figure 4: The Garbage Cart



Figure 5: The Garbage Bag Trolley



Description of Essential Duties

Essential Duty 1: Tile and Linoleum Floor Cleaning

The tasks that make up Essential Duty 1 (Tile and Linoleum Floor Cleaning) are: sweep floors (Task 1), mop floors (Task 2), buff and burnish floors (Task 3), and re-sweep floors (Task 4).

Sweep floors (Duty 1, Task 1)



Figure 6: Push Broom

Figure 7: Broom and Dust Pan

The Building Worker (Theatre) walks from the janitor room that is closest to their assigned cleaning area. They will select a push broom (see Figure 6), a regular broom (see Figure 7), and a long-handle dust pan (see Figure 7) and take them to the area that needs to be swept. The handle of the dust pan is 1 m off the ground.

The push broom is used to sweep the halls. The Building Worker (Theatre) holds the push broom and uses it to push the debris on the floor to one area. The Building Worker (Theatre) repeats this process until all the debris on the floor has been pushed to a particular area. They then use the normal brooms to sweep the



accumulated debris into the long-handle dust pan. When the dust pan is full, the Building Worker (Theatre) will empty the contents into a nearby trash receptacle.

The Building Worker (Theatre) will also use the push broom to remove scuff marks on the floor. They put the bristle part of the push broom over a scuff mark, put one foot on the bristle, and then move their foot “side to side” with enough pressure to erase the scuff mark.

Mop floors (Duty 1, Task 2)



Figure 8: Mopping

Figure 9: Mop Bucket

After the floors have been swept, the Building Worker (Theatre) will go back to the janitor room to get a mop and bucket (see Figures 8 and 9) and fills it with water and cleaner. The use of the Cleaning Agent Dispenser (see Figure 1) makes this a relatively straight-forward process. The Building Worker (Theatre) attaches the hose of the desired cleaning product to the tap on a sink so the premixed cleaning fluid is dispensed directly into the water. There is a hose on the nozzle coming out of the sink that extends downward. This hose is placed in the mop bucket. The mixed



cleaning fluid and water is filled until the mop bucket is half full. The bucket will weigh between 12-13 kg depending on how much water is added.

The Building Worker (Theatre) then pushes the filled bucket to the area that was swept clean of debris. The Building Worker (Theatre) mops by placing one hand near the top of the mop and the other closer to the middle of the mop. They walk backwards, mopping in an S shape. To wring out the mop, the Building Worker (Theatre) will lift the mop and place it into the wringer. A lever 0.5 m off the ground on the side of the mop bucket is then pulled. This requires a force of 7 kg.

Buff and burnish floors (Duty 1, Task 3)



Figure 10: Power Burnisher

After the floors are mopped and allowed to dry, if they require burnishing, they get burnished. The Power Burnisher (see Figure 10) is used to burnish floors. The Burnisher is wheeled to the area to be burnished and is plugged in. The Building Worker (Theatre) turns on the rotating Burnisher head through levers on the handles. They push the Burnisher to move it along the floors. Due to the motion of the bristles



on the bottom, the Burnisher will move side to side while it's being pushed forward over the floors. It requires 15-20 kg of force to push forward and attention to make sure that it does not get out of control moving side to side. Care must be taken when using a Burnisher that no pieces of grit or other miscellaneous pieces of hard debris stuck under the Burnisher. This can lead to the floors getting scratched.

Re-sweep floors after burnishing (Duty 1, Task 4)

After the floors are burnished, they are re-swept in a manner identical to Duty 1, Task 1 floor sweeping.

Table of Physical, Cognitive, and Psychosocial Demands

The physical, cognitive, and psychosocial demands of essential duty 1 are summarized in table 1. Table 1 located at the end of the report starting on page 26.



Essential Duty 2: Carpet Cleaning

The tasks that make up Essential Duty 2 (Carpet Cleaning) are: vacuuming (Task 1), steam cleaning (Task 2), and gum removal (Task 3).

Vacuum (Duty 2, Task 1)



Figure 11: Up-Right Vacuum

Figure 12: Backpack Vacuum

The Building Worker (Theatre) will walk to the nearest room or closet used for storing cleaning supplies and equipment and take one of the vacuums to carpeted areas. The Building Worker (Theatre) plugs in the vacuum and turns it on by flicking a switch. The vacuum is pushed and pulled across the carpeted areas (see Figure 11). The base of the vacuum is hinged, allowing individuals of varying heights to use the vacuum. While vacuuming the Building Worker (Theatre) has to move chairs and garbage cans out of the way. The Building Worker (Theatre) vacuums around large packages or parcels. Some areas have a great deal of boxes.

Some areas that require vacuuming are not easily accessible with the Up-Right Vacuum. In these cases, the Building Worker (Theatre) may don a backpack vacuum.



The vacuum is worn on the Building Worker (Theatre)'s back (see Figure 12). It has extensions that allow it to vacuum areas that are high or cramped (i.e. where the upright vacuum cannot easily get to). The backpack vacuum weighs 6 kilograms.

Extra care must be taken in vacuuming areas with sensitive equipment like the sound or lighting controls.

Steam clean (Duty 2, Task 2)



Figure 13: Steam Cleaner

Figure 14: Shampoo Extension

The Steam Cleaner (see Figure 13) has two 15 cm wheels and a handle that is 1 m off the ground. When operating the Carpet Shampooer, the Building Worker (Theatre) begins in one corner of a carpeted area and pulls the machine backwards until they reach a wall. Once it reaches the wall, it is turned and the process is repeated. When cleaning carpets in an area where it is difficult to turn, there is a vacuum extension that can be added to the side of the machine (see Figure 14).

The Building Worker (Theatre) uses the sink and the automatic dispenser in the janitorial room to pre-mix water and carpet shampoo into a 2 gallon polymer tank



using the same procedures as described earlier (see Mop and wax floors - Duty 1, Task 2). The Building Worker (Theatre) then manually moves the tank and the Carpet Shampooer to the carpeted area that requires shampooing. A compressed air sprayer is used to manually apply the water-shampoo mix from the 2 gallon tank. After the carpet has been sprayed, the Carpet Shampooer is used to vacuum the water-shampoo mix.

The force required to move the Steam Cleaner depends on the amount of water in it. When moving it from place to place, it can be tilted backwards to put weight on its wheels. This allows it to be pushed. It requires a sustained force of close to 10 kg to move. However, the Steam Cleaner is more difficult to use when cleaning carpets. The sustained force required to pull can be between 15-20 kg.

Gum Removal (Duty 2, Task 3)

When the Building Worker (Theatre) notices gum on the carpet, they spray it with gum removal cleaner and let the cleaner soak for 2 minutes. They then kneel down and scrap the gum off the carpet using a scraper.

Table of Physical, Cognitive, and Psychosocial Demands

The physical, cognitive, and psychosocial demands of essential duty 2 are summarized in table 2. Table 2 is located at the end of the report starting on page 29.



Essential Duty 3: Wall and Counter Cleaning

The tasks that make up Essential Duty 3 (Wall and Counter Cleaning) are: wiping counters and dusting (Task 1), window and glass cleaning (Task 2), and spot cleaning walls and vents (Task 3).

Wiping counters and dusting (Duty 3, Task 1)



Figure 15: Counter Cleaning

The Building Worker (Theatre) will take a rag from their cart and spray cleaning fluid onto it with a spray bottle. They will then walk to a surface that needs to be cleaned and wipe the area. They wipe around objects on counters and desks to avoid disturbing items. They repeat this process, occasionally rinsing out the cloth at nearby sinks, until the counters in nearby rooms are clean.

Window and glass cleaning (Duty 3, Task 2)

The Building Worker (Theatre) uses spray glass cleaner to wash the windows. They use a pad with a rough textured, non abrasive nylon face on one side to scrub heavy dirt from the window. The other side of the pad is plush. It is used to wash the



windows. A 30 cm or 34 cm rubber squeegee with swivel handle is used to remove the water from the windows, preventing streaks. To clean the tall windows in the theatre lobby, the Building Worker (Theatre) has an extendable squeegee that is able to reach the tops of the windows.

Spot cleaning walls and vents (Duty 3, Task 3)

While in an area, the Building Worker (Theatre) makes a determination as to whether or not the walls and vents require cleaning. If the walls require spot cleaning, the Building Worker (Theatre) will take a rag from their cart and spray cleaning fluid onto it with a spray bottle. They will then walk to a wall or vent that needs to be cleaned and wipe the area. They wipe around objects on pictures and objects on the wall to avoid disturbing items. They repeat this process, occasionally rinsing out the cloth at nearby sinks, until the walls and vents in the room are clean. If the walls do not require cleaning, they are left alone.

Table of Physical, Cognitive, and Psychosocial Demands

The physical, cognitive, and psychosocial demands of essential duty 3 are summarized in table 3. Table 3 is located at the end of the report starting on page 32.



Essential Duty 4: Garbage/Recycling Pick Up

The tasks that make up Essential Duty 4 (Garbage/Recycling Pick Up) are: garbage pick up (Task 1), recycling pick up (Task 2), and outdoor garbage pick up (Task 3).

Garbage Pick Up (Duty 4, Task 1)



Figure 16: Emptying the Garbage

Figure 17: Replacing the Bag

The Building Worker (Theatre) will move their cart (see the cart in Figure 16) to the areas they need to clean. They then walk around to the personal garbage containers in each area and empty the containers. The garbage containers weigh up to 3 kg. They need to be lifted from floor to waist level. They will then dump the contents of the garbage containers into the cart. If necessary, they will replace the plastic garbage bag in the personal container. The replacement bags are located in the storage compartment of the Building Worker (Theatre) carts. They repeat the dumping of the personal containers until the big garbage bag on their cart is full. Once this happens, they will tie up the large garbage bag, lift it out of their cart, and take it to the large garbage bins located outside the theatre.



Recycling Pick Up (Duty 4, Task 2)



Figure 18: Recycling containers

The Building Worker (Theatre) adds paper into a medium sized recycling container (similar to the one in Figure 18) from the small blue recycling boxes in personal Theatres. There are a variety of medium sized recycling containers. They have a similar size to the grey container in Figure 18, but not all the containers have handles. The personal blue recycling boxes need to be lifted from ground level to waist height to be dumped into the containers. After the recycling containers are filled with recycling, they are lifted from waist height to just below shoulder level to be dumped into the large blue recycling containers. The weight of this medium sized container varies depending on how full the recycling containers are. They can vary between 10 to 30 kg. If necessary, it is possible to get a second Building Worker (Theatre) to assist with the lift. The large blue recycling containers have wheels. After the recycling has been dumped into the blue bins, they are taken to collection areas in each building.



Outdoor Garbage Pick Up (Duty 4, Task 3)

The Building Worker (Theatre) will walk outside the theatre complex with a garbage can with wheels, a broom, and a long handled dust pan. They sweep up garbage into the dust pan and dump it into the garbage can. They repeat this until the area outside is free of garbage.

Table of Physical, Cognitive, and Psychosocial Demands

The physical, cognitive, and psychosocial demands of essential duty 4 are summarized in table 4. Table 4 is located at the end of the report starting on page 35.



Essential Duty 5: Bathroom Cleaning

The tasks that make up Essential Duty 5 (Bathroom Cleaning) are: sweep floors (Task 1), wash floors (Task 2), replenish supplies in the bathroom (Task 3), clean/disinfect (Task 4), and unclog drains and toilets (Task 5).

Sweep Floors, (Duty 5, Task 1)

The Building Worker (Theatre) sweeps the floors in bathrooms in the same fashion as they do in floor sweeping (see D1, T1).

Wash Floors (Duty 5, Task 2)

The Building Worker (Theatre) washes the floor in a manner similar to floor washing (see D1, T2) but they do not wax the tiled floors in the washrooms.

Replenish supplies in the bathroom (Duty 5, Task 3)

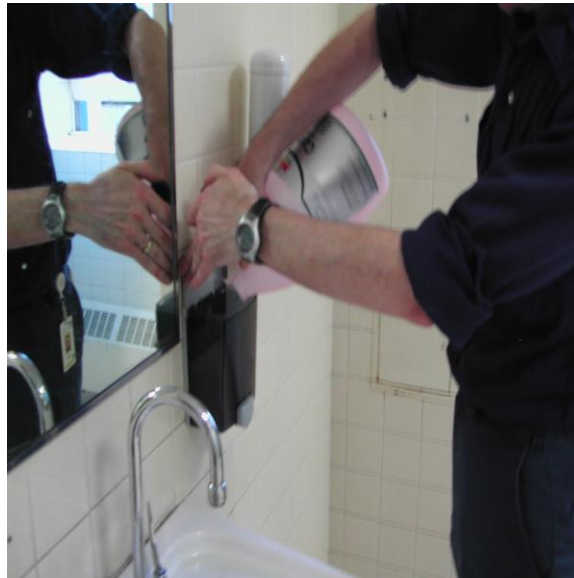


Figure 19: Refilling the dispenser

The Building Worker (Theatre) fills up the paper towel dispensers, toilet paper dispensers, and liquid soap dispensers when necessary. To do this, they get the needed supplies from the janitorial area and carry them to the bathroom. To fill up



the paper towel dispenser the Building Worker (Theatre) unlocks it and then pulls open the lid. The empty paper roll is removed from the dispenser and placed in the recycling. They lift the full roll of paper towel and place it in the dispenser. The toilet paper rolls are replaced in a manner similar to the paper towel, except that there is no need to open a lid to replace the full roll of toilet paper.

To full up the soap dispenser, the Building Worker (Theatre) needs to pry open the dispenser lid. They hold the lid open while raising the soap container to the top of the dispenser. They pour in the soap while holding the dispenser lid open. The liquid soap containers come in 4 L jugs. They weigh 3-4 kg when full. Some dispensers contain bags. When these soap bags need to be replaced, the soap dispenser is opened and the old bag is removed by the BW. The Building Worker (Theatre) then takes a full bag of soap and places it in the soap dispenser. The Building Worker (Theatre) also places a new urinal tablet in the urinals as needed.

Clean/Disinfect (Duty 5, Task 4)



Figure 20: Toilet Cleaning



Figure 21: Urinal Cleaning



The Building Worker (Theatre) cleans counters and walls in the same way as when they are wiping counters (see D3 T1). The Building Worker (Theatre) uses gloves when cleaning the bathroom and uses stronger cleansers to sanitize. They use cloths and scrub brushes to clean toilets and urinals. This requires spraying cleaner onto the surface and scrubbing the area until it is clean. The scrubber weighs 0.5 kg. The spray bottle weighs 2 kg. The location and design of some toilets requires the Building Worker (Theatre) to bend forward at the waist in order to scrub the toilets clean (see Figure 20).

Unclog Drains and Toilets (Duty 5, Task 5)

The Building Worker (Theatre) will sometimes need to pick wet paper out of drains in sinks to prevent overflow. The Building Worker (Theatre) may need to use a toilet plunger to unplug blocked toilets.

Table of Physical, Cognitive, and Psychosocial Demands

The physical, cognitive, and psychosocial demands of essential duty 5 are summarized in table 5. Table 5 is located at the end of the report starting on page 38.



Essential Duty 6: Event Preparation

The tasks that make up Essential Duty 6 (Event Preparation) are: event set up (Task 1), event take down (Task 2), and theatre cleaning (Task 3).

Event Set Up (Duty 6, Task 1)

During the shift assignments in the morning, the Building Worker (Theatre) supervisor will determine time and priority of equipment set up. The Building Worker (Theatre) will walk to location of set up in building. They will determine if a quick cleaning is necessary and clean the area if required. The Building Worker (Theatre) will then walk to the equipment storage area on the ground floor level. They will move the required equipment from storage area to location of set up. Equipment can consist of folding tables, folding chairs, stacking chairs, or miscellaneous other pieces of equipment. Equipment is usually loaded on a trolley cart for easier handling. Chairs are stacked to a comfortable level. The heavy equipment is lifted off cart by 2 BWs (Theatre) and set up in the area as required. After the set up, any unnecessary equipment and carts are returned to the storage area.

Event Take Down (Duty 6, Task 2)

The Building Worker (Theatre) will retrieve empty or partially empty carts from storage area and take them to the equipment that needs to be moved back into storage. They will fold down tables and chairs. Two BW's (Theatre) will then lift and place heavy equipment onto the cart. The previous step is repeated until the entire area has been taken down or the set up has been modified for the next user. The full trolleys are pushed back to the storage. The set up area is swept and mopped if required.



Theatre cleaning (Duty 6, Task 3)

The theatre aisles are swept the same way as Sweep Floors (Duty 1, Task 1) with some slight modifications. In order to clean the area between 2 rows of seats the BW (Theatre) will lean forward holding a push broom under one arm while putting enough force on the broom to sweep debris in the aisle. While they are doing this, they lean forward and push down the pans of the theatre seats to check the seats for gum. The seats are 0.5 m above the ground. Most workers will need to lean forward in a manner similar to that in figure 20 on page 21 to accomplish this task.

Building workers will also spot clean the theatre as necessary in a fashion similar to spot cleaning walls and vents (duty 3, task 3) on page 16.

Table of Physical, Cognitive, and Psychosocial Demands

The physical, cognitive, and psychosocial demands of essential duty 6 are summarized in table 6. Table 6 is located at the end of the report starting on page 41.



Description of Non-essential Tasks

The Building Worker (Theatre) may be required to perform other work tasks on an occasional basis. Examples of the tasks that may be performed are: needle pick up, remove staples from carpets, clean baseboards, dust blinds, clean out refrigerators in employee areas, clean outside sidewalk, snow removal, clean railings, and spot clean doors.

Data Collection

The PDA observations took place on in the evening on July 19, 2004. A group of employees were observed for 4 hours in the Orpheum, Vancouver Playhouse, and Queen Elizabeth Theatres. Supplementary data was gathered by interviews with the Theatre Building Workers and with their supervisor.

Report finalized on Aug 17, 2004 by Christopher Kimmie, MSc candidate UBC School of Occupational and Environmental Hygiene



Table 1: Building Worker (Theatre) Essential Duty 1 - Tile and Linoleum Floor Cleaning

| a) Physical Demands | | Frequency During Shift | | | | | Weight | | Comments | | |
|-------------------------|----------------------------|------------------------|------|------------|------------|----------|----------|------------|----------|--|------------------------------------|
| | | Never | Rare | Infrequent | Occasional | Frequent | Constant | Usual (kg) | | Max (kg) | |
| Strength | Lifting - Floor to Knuckle | | V | V | V | V | | 1-9 | 30 | Varies from rare to frequent | |
| | Lifting - Knuckle to Waist | | | V | V | V | | 1-9 | 30 | Varies from infrequent to frequent | |
| | Lifting - Over Head | | V | V | | | | 1-9 | 30 | Varies from rare to infrequent | |
| | Carrying - with Handles | | V | V | | | | 1-9 | 30 | Varies from rare to infrequent | |
| | Carrying - without Handles | | V | V | V | V | | 1-9 | 30 | Varies from rare to frequent | |
| | Pushing - Upper Extremity | | V | V | V | V | | 1-9 | 30 | " | |
| | Pushing - Hips/Legs assist | | V | V | V | V | | 1-9 | 30 | " | |
| | Pulling - Upper Extremity | | V | V | | | | 1-9 | 30 | Varies from rare to infrequent | |
| | Pulling - Hip/Leg Assist | | V | V | | | | 1-9 | 30 | " | |
| | Reach - Shoulder or Above | X | | | | | | | | | |
| | Reach - Below Shoulder | | V | V | | | | | | | Varies from rare to infrequent |
| | Handling | | | | | | X | | | | |
| | Mobility | Fine finger movements | | | | X | | | | | |
| Neck - Static Flexion | | | | | | X | | | | | |
| Neck - Static Neutral | | | | | | X | | | | | |
| Neck - Static Extension | | X | | | | | | | | | |
| Neck - Rotation | | | | | | X | | | | | |
| Throwing | | X | | | | | | | | | |
| Sitting | | X | | | | | | | | | |
| Standing | | | | | | | X | | | | |
| Walking | | | | | | | X | | | | |
| Running/Jumping | | X | | | | | | | | | |
| Climbing | | | V | V | | | | | | | Varies from rare to infrequent |
| Bending/Stooping | | | | V | V | V | | | | | Varies from infrequent to frequent |
| Crouching | | | V | V | V | | | | | | Varies from rare to occasional |
| Kneeling | | | V | V | V | | | | | | " |
| Crawling | | X | | | | | | | | | |
| Twisting | | X | | | | | | | | | |
| Balancing | | | V | V | | | | | | | Varies from rare to infrequent |
| Travelling | | | X | | | | | | | Between the Orpheum and the QE Theatre | |



Table 1 (continued): Building Worker (Theatre) Essential Duty 1 - Tile and Linoleum Floor Cleaning

| a) Physical Demands (continued) | | Frequency During Shift | | | | | | Comments |
|---------------------------------|-----------------------------|------------------------|---|---|---|---|--------------------------------|--------------------------------------|
| | | N | R | I | O | F | C | |
| Sensory / Perception | Hear/Conversations | | | X | | | | Receive instructions from supervisor |
| | Hear/Other Sounds | X | | | | | | |
| | Vision/Far | | | | | | X | |
| | Vision/Near | | X | | | | | |
| | Vision/Colour | | | X | | | | |
| | Vision/Depth | | | | | | X | |
| | Perception/Spatial | | | | | | X | |
| | Perception/Form | | | X | | | | |
| | Feeling | | | X | | | | |
| | Speech | | | X | | | | |
| Work Environment | Inside Work | | | | | | X | |
| | Outside Work | | X | | | | | |
| | Slippery | | V | V | V | | | Varies from rare to occasional |
| | Congested worksite | X | | | | | | |
| | Chemical Irritants | | | V | V | V | | Varies from infrequent to frequent |
| | Confined Space Entry | X | | | | | | |
| | Vapour Fumes | | V | V | V | | | Varies from rare to occasional |
| | Noise | | V | V | V | | | " |
| | Proximity to Moving Objects | X | | | | | | |
| | Hazardous Machines | X | | | | | | |
| | Electrical | X | | | | | | |
| | Sharp Tools | X | | | | | | |
| | Radiant/Thermal Energy | X | | | | | | |
| | Hot/Cold | X | | | | | | |
| | Humid | X | | | | | | |
| | Dust | | | V | V | V | | Varies from infrequent to frequent |
| | Organic Substances | | | V | V | V | | " |
| | Medical Waste | X | | | | | | |
| | Blood Products | X | | | | | | |
| | Lighting - Direct | | | | X | | | |
| Lighting - Indirect | | | X | | | | | |
| Vibration - Whole Body | X | | | | | | | |
| Vibration - Hand/Arm | | V | V | V | | | Varies from rare to occasional | |



Table 1 (continued): Building Worker (Theatre) Essential Duty 1 - Tile and Linoleum Floor Cleaning

| b) Cognitive and Psychosocial Demands | Frequency During Shift | | | Comments |
|---------------------------------------|------------------------|-------------------------|---------------------|---|
| | Never / Rare | Infrequent / Occasional | Frequent / Constant | |
| Degree of Supervision | X | | | |
| Time Pressure | | | X | Frequent occasions where time pressure an issue |
| Attention to Detail | | | X | Need to be able to spot dirty walls, spots on floors |
| Memory | | X | | |
| Interact with co-workers | | X | | Dependent upon the shift, some BWs work in teams. |
| Interact with public | X | | | |
| Work Alone | | X | | Dependent upon where cleaning. |
| Reading | X | | | |
| Writing | X | | | |
| Irregular Hours | | X | | When a show start earlier than normal, staff may start at 6 am instead of 7 am. |
| Operating Equipment | | X | | Power Burnisher |

Frequency rating definitions

The frequency rating definitions are from the Dictionary of Occupational Titles (DOT, 1991, 4rth edition) published by the US Department of Labor.

| | Time per Day | Percentage of Shift |
|------------|------------------------|---------------------|
| Never | 0 minutes | 0 % |
| Rare | 0 - 5 minutes | 0-1 % |
| Infrequent | 6 - 25 minutes | 2-5 % |
| Occasional | 26 minutes - 2.5 hours | 6-33 % |
| Frequent | 2.6 - 5.25 hours | 34-66 % |
| Constant | 5.26 - 8 hours | 67-100 % |



Table 2: Building Worker (Theatre) Essential Duty 2 - Carpet Cleaning

| a) Physical Demands | | Frequency During Shift | | | | | Weight | | Comments | |
|---------------------|----------------------------|------------------------|------|------------|------------|----------|----------|------------|--|------------------------------------|
| | | Never | Rare | Infrequent | Occasional | Frequent | Constant | Usual (kg) | | Max (kg) |
| Strength | Lifting - Floor to Knuckle | | V | V | V | V | | 1-9 | 30 | Varies from rare to frequent |
| | Lifting - Knuckle to Waist | | | V | V | V | | 1-9 | 30 | Varies from Infrequent to frequent |
| | Lifting - Over Head | | V | V | | | | 1-9 | 30 | Varies from rare to infrequent |
| | Carrying - with Handles | X | | | | | | | | |
| | Carrying - without Handles | | V | V | V | V | | 1-9 | 30 | Varies from rare to frequent |
| | Pushing - Upper Extremity | | V | V | V | V | | 1-9 | 36 | " |
| | Pushing - Hips/Legs assist | | V | V | V | V | | 1-9 | 36 | " |
| | Pulling - Upper Extremity | | V | V | | | | 1-9 | 36 | Varies from rare to infrequent |
| | Pulling - Hip/Leg Assist | | V | V | | | | 1-9 | 36 | " |
| | Reach - Shoulder or Above | | V | V | V | | | | | Varies from rare to occasional |
| | Reach - Below Shoulder | | V | V | | | | | | Varies from rare to infrequent |
| | Handling | | | | V | V | | | | Varies from occasional to frequent |
| | Fine finger movements | X | | | | | | | | |
| Mobility | Neck - Static Flexion | | | | | X | | | | |
| | Neck - Static Neutral | | | | | X | | | | |
| | Neck - Static Extension | X | | | | | | | | |
| | Neck - Rotation | | | | | X | | | | |
| | Throwing | X | | | | | | | | |
| | Sitting | X | | | | | | | | |
| | Standing | | | | | | X | | | |
| | Walking | | | | | | X | | | |
| | Running/Jumping | X | | | | | | | | |
| | Climbing | | V | V | | | | | | Varies from rare to infrequent |
| | Bending/Stooping | | | V | V | V | | | | Varies from infrequent to frequent |
| | Crouching | | V | V | V | | | | | Varies from rare to occasional |
| | Kneeling | | V | V | V | | | | | " |
| | Crawling | X | | | | | | | | |
| | Twisting | X | | | | | | | | |
| Balancing | | V | V | | | | | | Varies from rare to infrequent | |
| Travelling | | | X | | | | | | Between the Orpheum and the QE Theatre | |



Table 2 (continued): Building Worker (Theatre) Essential Duty 2 - Carpet Cleaning

| a) Physical Demands (continued) | | Frequency During Shift | | | | | | Comments |
|---------------------------------|-----------------------------|------------------------|---|---|---|---|---|--|
| | | N | R | I | O | F | C | |
| Sensory / Perception | Hear/Conversations | | | X | | | | Receive instruction from supervisor |
| | Hear/Other Sounds | X | | | | | | |
| | Vision/Far | | | | | | X | |
| | Vision/Near | | X | | | | | |
| | Vision/Colour | | | X | | | | Select proper coloured hose to dispense cleaning fluid |
| | Vision/Depth | | | | | | X | |
| | Perception/Spatial | | | | | | X | |
| | Perception/Form | | | X | | | | |
| | Feeling | X | | | | | | |
| | Speech | | | X | | | | |
| Work Environment | Inside Work | | | | | | X | |
| | Outside Work | | X | | | | | |
| | Slippery | | V | V | V | | | Varies from rare to occasional |
| | Congested worksite | X | | | | | | |
| | Chemical Irritants | | | V | V | V | | Varies from infrequent to frequent |
| | Confined Space Entry | X | | | | | | |
| | Vapour Fumes | | X | | | | | |
| | Noise | X | | | | | | |
| | Proximity to Moving Objects | X | | | | | | |
| | Hazardous Machines | X | | | | | | |
| | Electrical | X | | | | | | |
| | Sharp Tools | X | | | | | | |
| | Radiant/Thermal Energy | X | | | | | | |
| | Hot/Cold | X | | | | | | |
| | Humid | X | | | | | | |
| | Dust | X | | | | | | |
| | Organic Substances | X | | | | | | |
| | Medical Waste | X | | | | | | |
| | Blood Products | X | | | | | | |
| Lighting - Direct | | | | X | | | | |
| Lighting - Indirect | | | X | | | | | |
| Vibration - Whole Body | X | | | | | | | |
| Vibration - Hand/Arm | X | | | | | | | |



Table 2 (continued): Building Worker (Theatre) Essential Duty 2 - Carpet Cleaning

| b) Cognitive and Psychosocial Demands | Frequency During Shift | | | Comments |
|---------------------------------------|------------------------|-------------------------|---------------------|---|
| | Never / Rare | Infrequent / Occasional | Frequent / Constant | |
| Degree of Supervision | X | | | |
| Time Pressure | | | X | Frequent occasions with time pressure |
| Attention to Detail | | | X | Need to spot dirty floors |
| Memory | | X | | |
| Interact with co-workers | | X | | Dependent upon the shift, some BWs work in teams. |
| Interact with public | X | | | |
| Work Alone | | X | | Dependent upon where cleaning. |
| Reading | X | | | |
| Writing | X | | | |
| Irregular Hours | | X | | When a show start earlier than normal, staff may start at 6 am instead of 7 am. |
| Operating Equipment | | X | | Steam Cleaner, Vacuum |

Frequency rating definitions

The frequency rating definitions are from the Dictionary of Occupational Titles (DOT, 1991, 4rth edition) published by the US Department of Labor.

| | Time per Day | Percentage of Shift |
|------------|------------------------|---------------------|
| Never | 0 minutes | 0 % |
| Rare | 0 - 5 minutes | 0-1 % |
| Infrequent | 6 - 25 minutes | 2-5 % |
| Occasional | 26 minutes - 2.5 hours | 6-33 % |
| Frequent | 2.6 - 5.25 hours | 34-66 % |
| Constant | 5.26 - 8 hours | 67-100 % |



Table 3: BW(Theatre) Essential Duty 3 - Wall and Counter Cleaning

| a) Physical Demands | | Frequency During Shift | | | | | Weight | | Comments | |
|---------------------|----------------------------|------------------------|------|------------|------------|----------|--|------------------------------------|----------|------------------------------------|
| | | Never | Rare | Infrequent | Occasional | Frequent | Constant | Usual (kg) | | Max (kg) |
| Strength | Lifting - Floor to Knuckle | | | V | V | V | | 1-9 | 30 | Varies from infrequent to frequent |
| | Lifting - Knuckle to Waist | | | V | V | V | | 1-9 | 30 | " |
| | Lifting - Over Head | | V | V | | | | 1-9 | 30 | Varies from rare to infrequent |
| | Carrying - with Handles | X | | | | | | | | |
| | Carrying - without Handles | | V | V | V | V | | 1-9 | 30 | Varies from rare to frequent |
| | Pushing - Upper Extremity | | V | V | V | V | | 1-9 | 36 | " |
| | Pushing - Hips/Legs assist | | V | V | V | V | | 1-9 | 36 | " |
| | Pulling - Upper Extremity | | V | V | | | | 1-9 | 36 | Varies from rare to infrequent |
| | Pulling - Hip/Leg Assist | | V | V | | | | 1-9 | 36 | " |
| | Reach - Shoulder or Above | | | V | V | V | | Varies from infrequent to frequent | | |
| | Reach - Below Shoulder | | V | V | | | | Varies from rare to infrequent | | |
| | Handling | | | | V | V | V | Varies from occasional to constant | | |
| | Fine finger movements | X | | | | | | | | |
| Mobility | Neck - Static Flexion | | | | | X | | | | |
| | Neck - Static Neutral | | | | | X | | | | |
| | Neck - Static Extension | | | | | | Varies from infrequent to frequent | | | |
| | Neck - Rotation | | | | | X | | | | |
| | Throwing | X | | | | | | | | |
| | Sitting | X | | | | | | | | |
| | Standing | | | | | | X | | | |
| | Walking | | | | | | X | | | |
| | Running/Jumping | X | | | | | | | | |
| | Climbing | | V | V | | | | Varies from rare to infrequent | | |
| | Bending/Stooping | | | V | V | V | | Varies from infrequent to frequent | | |
| | Crouching | | V | V | V | | | Varies from rare to occasional | | |
| | Kneeling | | V | V | V | | | Varies from rare to occasional | | |
| | Crawling | X | | | | | | | | |
| | Twisting | X | | | | | | | | |
| | Balancing | | V | V | | | | Varies from rare to infrequent | | |
| Travelling | | | X | | | | Between the Orpheum and the QE Theatre | | | |



Table 3 (continued): BW(Theatre) Essential Duty 3 - Wall and Counter Cleaning

| a) Physical Demands (continued) | | Frequency During Shift | | | | | | Comments |
|---------------------------------|-----------------------------|------------------------|---|---|---|---|---|--------------------------------------|
| | | N | R | I | O | F | C | |
| Sensory / Perception | Hear/Conversations | | | X | | | | Receive instructions from supervisor |
| | Hear/Other Sounds | X | | | | | | |
| | Vision/Far | | | | | | X | |
| | Vision/Near | | X | | | | | |
| | Vision/Colour | | | X | | | | |
| | Vision/Depth | | | | | | X | |
| | Perception/Spatial | | | | | | X | |
| | Perception/Form | | | X | | | | |
| | Feeling | | | X | | | | |
| | Speech | | | X | | | | |
| Work Environment | Inside Work | | | | | | X | |
| | Outside Work | | X | | | | | |
| | Slippery | X | | | | | | |
| | Congested worksite | X | | | | | | |
| | Chemical Irritants | | V | V | V | V | | Varies from infrequent to frequent |
| | Confined Space Entry | X | | | | | | |
| | Vapour Fumes | | V | V | V | | | Varies from rare to occasional |
| | Noise | X | | | | | | |
| | Proximity to Moving Objects | X | | | | | | |
| | Hazardous Machines | X | | | | | | |
| | Electrical | X | | | | | | |
| | Sharp Tools | X | | | | | | |
| | Radiant/Thermal Energy | X | | | | | | |
| | Hot/Cold | X | | | | | | |
| | Humid | X | | | | | | |
| | Dust | | V | V | V | V | | Varies from infrequent to frequent |
| | Organic Substances | X | | | | | | |
| | Medical Waste | X | | | | | | |
| Blood Products | X | | | | | | | |
| Lighting - Direct | | | | X | | | | |
| Lighting - Indirect | | | X | | | | | |
| Vibration - Whole Body | X | | | | | | | |
| Vibration - Hand/Arm | X | | | | | | | |



Table 3 (continued): BW(Theatre) Essential Duty 3 - Wall and Counter Cleaning

| b) Cognitive and Psychosocial Demands | Frequency During Shift | | | Comments |
|---------------------------------------|------------------------|-------------------------|---------------------|---|
| | Never / Rare | Infrequent / Occasional | Frequent / Constant | |
| Degree of Supervision | X | | | |
| Time Pressure | | | X | Frequent occasions with time pressure |
| Attention to Detail | | | X | Need to spot clean dirty walls |
| Memory | | X | | |
| Interact with co-workers | | X | | Dependent upon the shift, some BWs work in teams. |
| Interact with public | X | | | |
| Work Alone | | X | | Dependent upon where cleaning. |
| Reading | X | | | |
| Writing | X | | | |
| Irregular Hours | | X | | When a show start earlier than normal, staff may start at 6 am instead of 7 am. |
| Operating Equipment | X | | | |

Frequency rating definitions

The frequency rating definitions are from the Dictionary of Occupational Titles (DOT, 1991, 4rth edition) published by the US Department of Labor.

| | Time per Day | Percentage of Shift |
|------------|------------------------|---------------------|
| Never | 0 minutes | 0 % |
| Rare | 0 - 5 minutes | 0-1 % |
| Infrequent | 6 - 25 minutes | 2-5 % |
| Occasional | 26 minutes - 2.5 hours | 6-33 % |
| Frequent | 2.6 - 5.25 hours | 34-66 % |
| Constant | 5.26 - 8 hours | 67-100 % |



Table 4: Building Worker (Theatre) Essential Duty 4 - Garbage and Recycling

| a) Physical Demands | | Frequency During Shift | | | | | Weight | | Comments | |
|---------------------|----------------------------|------------------------|------|------------|------------|----------|--|------------------------------------|----------|------------------------------------|
| | | Never | Rare | Infrequent | Occasional | Frequent | Constant | Usual (kg) | | Max (kg) |
| Strength | Lifting - Floor to Knuckle | | | V | V | V | | 1-9 | 30 | Varies from infrequent to frequent |
| | Lifting - Knuckle to Waist | | | V | V | V | | 1-9 | 30 | " |
| | Lifting - Over Head | | V | V | | | | 1-9 | 30 | Varies from rare to infrequent |
| | Carrying - with Handles | | | V | V | V | | 1-9 | 30 | from infrequent to frequent |
| | Carrying - without Handles | | V | V | V | V | | 1-9 | 30 | Varies from rare to frequent |
| | Pushing - Upper Extremity | | V | V | V | V | | 1-9 | 36 | " |
| | Pushing - Hips/Legs assist | | V | V | V | V | | 1-9 | 36 | " |
| | Pulling - Upper Extremity | | V | V | | | | 1-9 | 36 | Varies from rare to infrequent |
| | Pulling - Hip/Leg Assist | | V | V | | | | 1-9 | 36 | " |
| | Reach - Shoulder or Above | | V | V | | | | Varies from rare to infrequent | | |
| | Reach - Below Shoulder | | | V | V | V | V | Varies from infrequent to constant | | |
| | Handling | | | | V | V | V | Varies from occasional to constant | | |
| | Fine finger movements | X | | | | | | | | |
| Mobility | Neck - Static Flexion | | | | | | X | | | |
| | Neck - Static Neutral | | | | | | X | | | |
| | Neck - Static Extension | | V | V | | | | Varies from rare to infrequent | | |
| | Neck - Rotation | | | | | X | | | | |
| | Throwing | | V | V | | | | Varies from rare to infrequent | | |
| | Sitting | X | | | | | | | | |
| | Standing | | | | | | X | | | |
| | Walking | | | | | | X | | | |
| | Running/Jumping | X | | | | | | | | |
| | Climbing | | V | V | | | | Varies from rare to infrequent | | |
| | Bending/Stooping | | | V | V | V | | Varies from infrequent to frequent | | |
| | Crouching | | V | V | V | | | Varies from rare to occasional | | |
| | Kneeling | | V | V | V | | | " | | |
| | Crawling | X | | | | | | | | |
| | Twisting | | V | V | V | | | Varies from rare to occasional | | |
| Balancing | | V | V | V | | | " | | | |
| Travelling | | | X | | | | Between the Orpheum and the QE Theatre | | | |



Table 4 (continued): Building Worker (Theatre) Essential Duty 4 - Garbage and Recycling

| a) Physical Demands (continued) | | Frequency During Shift | | | | | | Comments |
|---------------------------------|-----------------------------|------------------------|---|---|---|---|---|--------------------------------------|
| | | N | R | I | O | F | C | |
| Sensory / Perception | Hear/Conversations | | | X | | | | Receive instructions from supervisor |
| | Hear/Other Sounds | X | | | | | | |
| | Vision/Far | | | | | | X | |
| | Vision/Near | | X | | | | | |
| | Vision/Colour | | | X | | | | |
| | Vision/Depth | | | | | | X | |
| | Perception/Spatial | | | | | | X | |
| | Perception/Form | | | X | | | | |
| | Feeling | | | X | | | | |
| | Speech | | | X | | | | |
| Work Environment | Inside Work | | | | | | X | |
| | Outside Work | | | X | | | | Garbage pick up |
| | Slippery | X | | | | | | |
| | Congested worksite | X | | | | | | |
| | Chemical Irritants | | V | V | | | | Varies from rare to infrequent |
| | Confined Space Entry | X | | | | | | |
| | Vapour Fumes | | V | V | | | | Varies from rare to infrequent |
| | Noise | X | | | | | | |
| | Proximity to Moving Objects | X | | | | | | |
| | Hazardous Machines | X | | | | | | |
| | Electrical | X | | | | | | |
| | Sharp Tools | X | | | | | | |
| | Radiant/Thermal Energy | X | | | | | | |
| | Hot/Cold | X | | | | | | |
| | Humid | X | | | | | | |
| | Dust | | | V | V | V | | Varies from infrequent to frequent |
| | Organic Substances | X | | | | | | |
| | Medical Waste | X | | | | | | |
| | Blood Products | X | | | | | | |
| | Lighting - Direct | | | | X | | | |
| Lighting - Indirect | | | X | | | | | |
| Vibration - Whole Body | X | | | | | | | |
| Vibration - Hand/Arm | X | | | | | | | |



Table 4 (continued): Building Worker (Theatre) Essential Duty 4 - Garbage and Recycling

| b) Cognitive and Psychosocial Demands | Frequency During Shift | | | Comments |
|---------------------------------------|------------------------|-------------------------|---------------------|---|
| | Never / Rare | Infrequent / Occasional | Frequent / Constant | |
| Degree of Supervision | X | | | |
| Time Pressure | | | X | Frequent occasions with time pressure |
| Attention to Detail | | X | | |
| Memory | | X | | |
| Interact with co-workers | | X | | Dependent upon the shift, some BWs work in teams. |
| Interact with public | X | | | |
| Work Alone | | X | | Dependent upon where cleaning. |
| Reading | X | | | |
| Writing | X | | | |
| Irregular Hours | | X | | When a show start earlier than normal, staff may start at 6 am instead of 7 am. |
| Operating Equipment | X | | | |

Frequency rating definitions

The frequency rating definitions are from the Dictionary of Occupational Titles (DOT, 1991, 4rth edition) published by the US Department of Labor.

| | Time per Day | Percentage of Shift |
|------------|------------------------|---------------------|
| Never | 0 minutes | 0 % |
| Rare | 0 - 5 minutes | 0-1 % |
| Infrequent | 6 - 25 minutes | 2-5 % |
| Occasional | 26 minutes - 2.5 hours | 6-33 % |
| Frequent | 2.6 - 5.25 hours | 34-66 % |
| Constant | 5.26 - 8 hours | 67-100 % |



Table 5: Building Worker (Theatre) Essential Duty 5 - Bathroom Cleaning

| a) Physical Demands | | Frequency During Shift | | | | | Weight | | Comments | |
|---------------------|----------------------------|------------------------|------|------------|------------|----------|--|------------------------------------|----------|------------------------------------|
| | | Never | Rare | Infrequent | Occasional | Frequent | Constant | Usual (kg) | | Max (kg) |
| Strength | Lifting - Floor to Knuckle | | | V | V | V | | 1-9 | 30 | Varies from infrequent to frequent |
| | Lifting - Knuckle to Waist | | | V | V | V | | 1-9 | 30 | " |
| | Lifting - Over Head | | V | V | | | | 1-9 | 30 | Varies from rare to infrequent |
| | Carrying - with Handles | X | | | | | | | | |
| | Carrying - without Handles | | V | V | V | V | | 1-9 | 30 | Varies from rare to frequent |
| | Pushing - Upper Extremity | | V | V | V | V | | 1-9 | 36 | " |
| | Pushing - Hips/Legs assist | | V | V | V | V | | 1-9 | 36 | " |
| | Pulling - Upper Extremity | | V | V | | | | 1-9 | 36 | Varies from rare to infrequent |
| | Pulling - Hip/Leg Assist | | V | V | | | | 1-9 | 36 | " |
| | Reach - Shoulder or Above | | V | V | | | | Varies from rare to infrequent | | |
| | Reach - Below Shoulder | | | V | V | V | | Varies from infrequent to frequent | | |
| | Handling | | | V | V | V | | Varies from occasional to frequent | | |
| | Fine finger movements | X | | | | | | | | |
| Mobility | Neck - Static Flexion | | | | | | | | | X |
| | Neck - Static Neutral | | | | | | | | | X |
| | Neck - Static Extension | | V | V | | | | Varies from rare to infrequent | | |
| | Neck - Rotation | | | | | X | | | | |
| | Throwing | | V | V | | | | Varies from rare to infrequent | | |
| | Sitting | X | | | | | | | | |
| | Standing | | | | | | | | | X |
| | Walking | | | | | | | | | X |
| | Running/Jumping | X | | | | | | | | |
| | Climbing | X | | | | | | | | |
| | Bending/Stooping | | | V | V | V | | Varies from infrequent to frequent | | |
| | Crouching | | V | V | V | | | Varies from rare to occasional | | |
| | Kneeling | | V | V | V | | | " | | |
| | Crawling | X | | | | | | | | |
| | Twisting | | | | | | | | | |
| Balancing | X | | | | | | | | | |
| Travelling | | | X | | | | Between the Orpheum and the QE Theatre | | | |



Table 5 (continued): Building Worker (Theatre) Essential Duty 5 - Bathroom Cleaning

| a) Physical Demands (continued) | | Frequency During Shift | | | | | | Comments |
|---------------------------------|-----------------------------|------------------------|---|---|---|---|---|--------------------------------------|
| | | N | R | I | O | F | C | |
| Sensory / Perception | Hear/Conversations | | | X | | | | Receive instructions from supervisor |
| | Hear/Other Sounds | X | | | | | | |
| | Vision/Far | | | | | | X | |
| | Vision/Near | | X | | | | | |
| | Vision/Colour | | | X | | | | |
| | Vision/Depth | | | | | | X | |
| | Perception/Spatial | | | | | | X | |
| | Perception/Form | | | X | | | | |
| | Feeling | | | X | | | | |
| | Speech | | | X | | | | |
| Work Environment | Inside Work | | | | | | X | |
| | Outside Work | X | | | | | | |
| | Slippery | | | V | V | V | | Varies from infrequent to frequent |
| | Congested worksite | X | | | | | | |
| | Chemical Irritants | | V | V | | | | Varies from rare to infrequent |
| | Confined Space Entry | X | | | | | | |
| | Vapour Fumes | | V | V | | | | Varies from rare to infrequent |
| | Noise | X | | | | | | |
| | Proximity to Moving Objects | X | | | | | | |
| | Hazardous Machines | X | | | | | | |
| | Electrical | X | | | | | | |
| | Sharp Tools | X | | | | | | |
| | Radiant/Thermal Energy | X | | | | | | |
| | Hot/Cold | X | | | | | | |
| | Humid | X | | | | | | |
| | Dust | | | V | V | V | | Varies from infrequent to frequent |
| | Organic Substances | | | V | V | V | | " |
| | Medical Waste | X | | | | | | |
| Blood Products | X | | | | | | | |
| Lighting - Direct | | | | X | | | | |
| Lighting - Indirect | | | X | | | | | |
| Vibration - Whole Body | X | | | | | | | |
| Vibration - Hand/Arm | X | | | | | | | |



Table 5 (continued): Building Worker (Theatre) Essential Duty 5 - Bathroom Cleaning

| b) Cognitive and Psychosocial Demands | Frequency During Shift | | | Comments |
|---------------------------------------|------------------------|-------------------------|---------------------|---|
| | Never / Rare | Infrequent / Occasional | Frequent / Constant | |
| Degree of Supervision | X | | | |
| Time Pressure | | | X | Frequent occasions with time pressure |
| Attention to Detail | | | X | Need to clean dirty surfaces |
| Memory | | X | | |
| Interact with co-workers | | X | | Dependent upon the shift, some BWs work in teams. |
| Interact with public | X | | | |
| Work Alone | | X | | Dependent upon where cleaning. |
| Reading | X | | | |
| Writing | X | | | |
| Irregular Hours | | X | | When a show start earlier than normal, staff may start at 6 am instead of 7 am. |
| Operating Equipment | X | | | |

Frequency rating definitions

The frequency rating definitions are from the Dictionary of Occupational Titles (DOT, 1991, 4rth edition) published by the US Department of Labor.

| | Time per Day | Percentage of Shift |
|------------|------------------------|---------------------|
| Never | 0 minutes | 0 % |
| Rare | 0 - 5 minutes | 0-1 % |
| Infrequent | 6 - 25 minutes | 2-5 % |
| Occasional | 26 minutes - 2.5 hours | 6-33 % |
| Frequent | 2.6 - 5.25 hours | 34-66 % |
| Constant | 5.26 - 8 hours | 67-100 % |



Table 5: Building Worker (Theatre) Essential Duty 6 - Event Preparation

| a) Physical Demands | | Frequency During Shift | | | | | Weight | | Comments | |
|-----------------------|----------------------------|------------------------|------|------------|------------|----------|--|--------------------------------------|----------|--------------------------------------|
| | | Never | Rare | Infrequent | Occasional | Frequent | Constant | Usual (kg) | | Max (kg) |
| Strength | Lifting - Floor to Knuckle | | | V | V | V | | 1-9 | 30 | Varies from infrequent to frequent |
| | Lifting - Knuckle to Waist | | | V | V | V | | 1-9 | 30 | " |
| | Lifting - Over Head | | V | V | | | | 1-9 | 30 | Varies from rare to infrequent |
| | Carrying - with Handles | | V | V | | | | | | " |
| | Carrying - without Handles | | | V | V | V | | 1-9 | 30 | Varies from infrequent to frequent |
| | Pushing - Upper Extremity | | | V | V | V | | 1-9 | 36 | " |
| | Pushing - Hips/Legs assist | | | V | V | V | | 1-9 | 36 | " |
| | Pulling - Upper Extremity | | | V | V | | | 1-9 | 36 | Varies from infrequent to occasional |
| | Pulling - Hip/Leg Assist | | | V | V | | | 1-9 | 36 | " |
| | Reach - Shoulder or Above | | | V | V | | | " | | |
| | Reach - Below Shoulder | | | V | V | V | | Varies from infrequent to frequent | | |
| | Handling | | | V | V | V | | Varies from occasional to frequent | | |
| Fine finger movements | X | | | | | | | | | |
| Mobility | Neck - Static Flexion | | | V | V | | | Varies from infrequent to occasional | | |
| | Neck - Static Neutral | | | V | V | | | " | | |
| | Neck - Static Extension | | | V | V | | | " | | |
| | Neck - Rotation | | | V | V | | | " | | |
| | Throwing | | V | V | | | | Varies from rare to infrequent | | |
| | Sitting | X | | | | | | | | |
| | Standing | | | | | | X | | | |
| | Walking | | | | | | X | | | |
| | Running/Jumping | X | | | | | | | | |
| | Climbing | X | | | | | | | | |
| | Bending/Stooping | | | V | V | V | | Varies from infrequent to frequent | | |
| | Crouching | | V | V | V | | | Varies from rare to occasional | | |
| | Kneeling | | V | V | V | | | " | | |
| | Crawling | X | | | | | | | | |
| | Twisting | | | | | | | | | |
| Balancing | X | | | | | | | | | |
| Travelling | | | X | | | | Between the Orpheum and the QE Theatre | | | |



Table 5 (continued): Building Worker (Theatre) Essential Duty 6 - Event Preparation

| a) Physical Demands (continued) | | Frequency During Shift | | | | | | Comments |
|---------------------------------|-----------------------------|------------------------|---|---|---|---|---|--------------------------------------|
| | | N | R | I | O | F | C | |
| Sensory / Perception | Hear/Conversations | | | X | | | | Receive instructions from supervisor |
| | Hear/Other Sounds | X | | | | | | |
| | Vision/Far | | | | | | X | |
| | Vision/Near | | X | | | | | |
| | Vision/Colour | | | X | | | | |
| | Vision/Depth | | | | | | X | |
| | Perception/Spatial | | | | | | X | |
| | Perception/Form | | | X | | | | |
| | Feeling | | | X | | | | |
| | Speech | | | X | | | | |
| Work Environment | Inside Work | | | | | | X | Varies from infrequent to occasional |
| | Outside Work | X | | | | | | |
| | Slippery | | | V | V | | | |
| | Congested worksite | X | | | | | | |
| | Chemical Irritants | X | | | | | | |
| | Confined Space Entry | X | | | | | | |
| | Vapour Fumes | X | | | | | | |
| | Noise | X | | | | | | |
| | Proximity to Moving Objects | X | | | | | | |
| | Hazardous Machines | X | | | | | | |
| | Electrical | X | | | | | | |
| | Sharp Tools | X | | | | | | |
| | Radiant/Thermal Energy | X | | | | | | |
| | Hot/Cold | X | | | | | | |
| | Humid | X | | | | | | |
| | Dust | | | V | V | V | | |
| | Organic Substances | X | | | | | | |
| | Medical Waste | X | | | | | | |
| Blood Products | X | | | | | | | |
| Lighting - Direct | | | | X | | | | |
| Lighting - Indirect | | | X | | | | | |
| Vibration - Whole Body | X | | | | | | | |
| Vibration - Hand/Arm | X | | | | | | | |



Table 5 (continued): Building Worker (Theatre) Essential Duty 6 - Event Preparation

| b) Cognitive and Psychosocial Demands | Frequency During Shift | | | Comments |
|---------------------------------------|------------------------|-------------------------|---------------------|---|
| | Never / Rare | Infrequent / Occasional | Frequent / Constant | |
| Degree of Supervision | X | | | |
| Time Pressure | | | X | Frequent occasions with time pressure |
| Attention to Detail | | | X | Need to clean dirty surfaces |
| Memory | | X | | |
| Interact with co-workers | | X | | Dependent upon the shift, some BWs work in teams. |
| Interact with public | X | | | |
| Work Alone | | X | | Dependent upon where cleaning. |
| Reading | X | | | |
| Writing | X | | | |
| Irregular Hours | | X | | When a show start earlier than normal, staff may start at 6 am instead of 7 am. |
| Operating Equipment | X | | | |

Frequency rating definitions

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